# CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, April 27, 1911.

## CONTENTS.

CONSTRUCTION NEWS:
Railways .......... 195
Electric Railways .......... 195
Light and Power Plants .......... 195
Bridges .......... 196
Buildings .......... 197
Water Supply and Irrigation .......... 198
Sewerage .......... 199
Garbage Disposal .......... 200
Streets and Roads .......... 200
Manufacturing Plants .......... 201
Miscellaneous Contracts .......... 203
U. S. Possessions and Cuba .......... 203
Foreign Contracts .......... 203
Contract Prices .......... 203
Plans and Specifications on File .......... 204
List of Contracts Pending .......... 204
READERS' WANTS .......... 205
INDUSTRIAL NOTES .......... 205
PROPOSALS .......... 205

## RAILWAYS.

*(*Denotes that this work is advertised in Engineering News.)*

MAINE.—Bangor & Aroostock R. R.—Steps are being taken to build the so-called Allagash Extension. This will call for 157 miles of new line, estimated to cost $7,750,000, of which about 100 miles will be built this summer. This line will extend from West Geboois to Saint Francis. A. R. Gould, of the Aroostook Valley, has a charter for a road from St. John, New Brunswick, to a point on the south side of the St. Lawrence River, opposite Quebec. This will connect the line now operating between Aroostook Junction and Washburn with the two Canadian points. It will permit of a line being built from Quebec to St. John, about 200 miles shorter than the present line, which runs through Canada the entire distance. This line, which will be built according to steam railway practice, will be operated by electricity.

NEW YORK.—New York Central Lines.—The Public Service Commission has issued its final order instructing the railroad to eliminate the grade crossing at the Bronxville station. The vehicular traffic will pass under the railway. The cost is estimated at $150,000. George W. Kittredge, Grand Central Station, New York, is Ch. Engr.

NEW JERSEY.—Central R. R. of N. J.—This company contemplates raising the drawbridge over the Hackensack and Passaic Rivers and elevating the track approaches on the Newark Branch. J. O. Osgood, 143 Liberty St., is Ch. Engr.

NORTH CAROLINA.—Tennessee & North Carolina R. R.—We are officially advised that surveys have been made and most of the right-of-way obtained for the 38-mile new line from Waterville, Tenn., to Canton, N. C. J. B. Hart is Pres., and B. R. Britt, Ch. Engr., both of Clarksburg, W. Va. Noted on April 6.

MISSISSIPPI.—Meridian & Deep Water R. R. Co.—This company, recently incorporated, proposes to build a line from Meridian due east to the Tombigbee River, about 40 miles. It is the intention to extend the line to Birmingham. Those interested are C. F. Scofield and S. A. Neville, Meridian, Miss., and W. C. Stowell, Chicago.

KENTUCKY.—Kentucky Central R. R.—A survey is being made across the Ohio River, from Evansville, Ind., to Henderson, Ky. James Saunders is Engr.

Illinois Central R. R.—Press reports state that the cut-off between Mayfield and Gilbertsville, about 30 miles, will be built this year. A. S. Baldwin, Chicago, Ill., is Ch. Engr.

OHIO.—New York Central Lines (Lake Shore & Michigan Southern Ry.).—Announcement has been made that double-tracking work on the Franklin division, between Dorset and Latimer, about 26 miles, will be done this year. Samuel Rockwell, Cleveland, Ohio, is Ch. Engr.

Pennsylvania System (Cleveland & Pittsburg R. R.).—Press advices state that property is now being purchased by the company in the eastern part of Ohio, the object being to build a low-grade cut-off from Smiths Ferry, Pa., which is at the Ohio-Pennsylvania State line, and the Ohio River, through Columbiana County to Kensington, a small station. Noted on April 20.

MISSOURI.—Missouri, Arkansas & Gulf Ry.—This new company proposes to build a line from Rolla, Phelps County, to Bakersfield, Ozark County, a distance of 125 miles. It will run through the counties of Phelps, Dent, Texas, Howell, Douglas and Ozark, and will traverse a country that is now remote from rail and other transportation facilities. The incorporators are as follows: E. C. Comstock and Carl Kimmel, of Leonia, Mo.; E. C. Halbert, of Licking; J. W. Cook, of Lenox; J. A. Frank, of Arnett; Gilbert Lay, of St. Clair; and W. E. Fink, of Springfield.

Oklahoma, Kansas & Missouri Ry.—Arrangements have been made for the extension of this line from Hattenville to Galena and Joplin through the lead and zinc mining districts. M. C. Harper is Gen. Mgr.

TEXAS.—Gulf & Rio Grande Construction Co.—This company contemplates the construction of a railroad through southwest Texas from some point on the Gulf Coast to Eagle Pass, a distance of about 200 miles. The incorporators are R. K. Valentine, of Brooklyn, N. Y.; A. W. Lilliendahl, of Saltillo, Mexico; Robert P. Conn and Albert Toll, of San Antonio; and Lee Firsby, of Beeville, Tex. It is announced that the proposed road has been financed and that the construction work will soon be started.

Gulf, Texas & Western Ry.—Two extensions are planned. One will run down Jacksboro to Dallas, about 100 miles, with a 20-mile branch line to Fort Worth, and the other will run west from Seymour to Lubbock, a growing town situated in the western part of the Panhandle region. This latter extension will be 150 miles long. J. J. Jermyn, Scranton, Pa., is Pres. and B. B. Cain, Dallas, Tex., is Vice-Pres. & Gen. Mgr.

✚ONTARIO.—Canadian Pacific Ry.—The contract for double tracking the road between Smith Falls and Bathurst has been awarded to JONES & GIROUARD, Ottawa, Ont.

✚SASKATCHEWAN.—Canadian Pacific Ry.—The sub-contract for a 7-mile section between Moosejaw and Gravelburg has been awarded to CHARLES TOMPKINS, Omaha, Neb.

BRITISH COLUMBIA.—Canadian Northern Pacific Ry.—MacKenzie, Mann & Co., Ltd., Vancouver, B. C., will receive bids until May 12 for the construction of the following sections: (1) Hope to Boston Bar, (2) Boston Bar to Lytton, (3) Lytton to Ashcroft, (4) Ashcroft to crossing of North Thompton River. Including clearing, grubbing, grading, bridges, trestles, culverts, masonry and fencing. Plans, specifications, etc., may be seen at o..ce, 18 Hastings St., Vancouver. Total work to be completed within two years from date of signing contract.

## ELECTRIC RAILWAYS.

*(✚Denotes a contract awarded.)*

COLERAIN, MASS.—The Shelburne Falls & Colerain Street Ry. Co. will soon award contract for extending its line from Colerain, Mass., to Wilmington, Vt. Frank L. Reed, Shelburne Falls, is Gen. Mgr.

MILLERS FALLS, MASS.—The Connecticut Valley St. Ry. Co., which recently assumed the management of the Athol & Orange St. Ry. Co., will probably build a line along the Millers River between Millers Falls and Orange, about 12 miles. The existing line from Athol to Orange will be rehabilitated. Frederick E. Pierce, Greenfield, is Pres. and John A. Targett, Millers Falls, is Engr.

HUNTINGTON, N. Y.—The Huntington R. R. Co., controlled by the Long Island R. R., is considering an extension from Huntington over East Main St. directly east from New York Ave. past East End Park and Park Ave., thence it will continue eastwardly over the Huntington and Northport road to the top of Fort Hill. From a point near the former Nathan B. Conklin peach orchard the line will turn north and pass over the property of the Huntington Bay Association to Huntington Bay, a distance of about three miles in all. Ralph Peters, Pennsylvania Station, New York, is Pres.

NEW YORK, N. Y.—The Interborough Rapid Transit Co. has asked for bids on 80,000 tons of fabricated structural steel for widening and extending the Second Ave., Third Ave., Sixth Ave. and Ninth Ave. elevated railroad lines, including a drawbridge over the Harlem River. Bids will be submitted in three months and work will be completed within two years. The widening of the structure is to provide for a double track express service. Plans and specifications are ready for the mills and fabricating shops.

PORT CHESTER, N. Y.—The New York & Stamford Ry. Co. has been authorized to exercise a franchise granted by Port Chester permitting it to construct a single-track line in and through N. Regent St., S. Regent St. and Putnam Ave. C. S. Mellen, New Haven, Conn., is Pres.

BELLEVILLE (Newark post-office), N. J.—The Public Ry. Co. has been petitioned to extend its Mt. Prospect Ave. line through Belleville. R. E. Danforth, Newark, is Gen. Mgr.

NORRISTOWN, PA.—The Philadelphia & Western Ry. Co. will extend its line from Strafford to Norristown, about seven miles. Stone & Webster Engineering Corporation, 147 Milk St. Boston, Mass., has charge of the work.

POTTSTOWN, PA.—Application has been made for a charter for the Pottstown & Phoenixville Ry. Co. to construct a short railway in Lower Pottsgrove Township. This is another step in the plans to build the trolley link from Spring City to Saratoga by way of Royersford, connecting with the Montgomery & Chester line from Spring City to Phoenixville. George V. Malsburger and H. T. Swinehart, Pottstown, Pa., and C. Taylor Leland, 2215 Land Title Bldg., Philadelphia, are interested. Noted March 2.

ROCKWOOD, PA.—The Somerset St. Ry. Co., which was chartered last year, will build the line between Somerset and Rockwood, about 10 miles. The right-of-way has been obtained. G. E. Winslow, Somerset, Pa., is Ch. Engr.

WAYNESBURG, PA.—The Waynesburg & Blacksville St. Ry. Co. will, according to press reports, let contracts by May 15 for the construction of their 13-mile line. The cost is estimated at $250,000. Samuel Eaken, Wadestown, W. Va., is Pres.; James G. Samsell, Morgantown, W. Va., is Ch. Engr. Noted March 16.

WILMINGTON, DEL.—A franchise has been granted to the Wilmington, New Castle & Southern Ry. Co. to build a railway along the causeway to the city line, starting from Market and Front Sts. The line will then be extended to New Castle.

The People's Ry. Co. contemplates building an extension from Front and King Sts. to foot of King St. It is stated a franchise has been granted.

TOWSON, MD.—The Towson & Cockeysville Electric Ry. Co. has secured permission to cross the country roads. J. Alexis Shriver, Belair, Md., is Pres. Noted March 30.

CLARKSBURG, W. VA.—The Fairmount & Clarksburg Traction Co. propose to extend its lines from Clarksburg to the Fair Grounds, about two miles. S. L. Walton, Fairmont, W. Va., is Pres.

MONTEZUMA, GA.—The Georgia Power Co., of Jackson, is considering a plan to build a railway from Montezuma by way of Oglethorpe and Miona to Reynolds.

AKRON, OHIO.—The Northern Ohio Traction & Light Co. has awarded a contract to FRANK WISE, of Macedonia, Ohio, to double track its line from Chittendons toward Cleveland. The entire line between Akron and Cleveland will also be double tracked.

BESSEMER, MICH.—A franchise has been granted to the Gogebic & Iron Counties Ry. & Light Co., Ashland, Wis., to build a railway through Bessemer. This railway will connect Ironwood and Bessemer. M. M. Reid, Gen. Mgr.

MANKATO, MINN.—J. Devereaux O'Reilly, New Orleans, La., has completed surveys for an extension to be built from Mankato to St. Peter by the Mankato Electric Traction Co. H. E. Hance, this city, is Gen. Mgr.

ARKANSAS CITY, KAN.—The Arkansas City & Wellington Northwestern Ry. Co. will survey a route for a railway from this city to Conway Springs by way of Wellington. George H. Hunter is Pres. Fremont Hill, Wichita, Kan., will make the survey.

VIRGINIA CITY, MONT.—The Virginia City Southern Electric Ry. Co. has received a franchise to build its tracks through Virginia City. This is part of a plan to build a line between Virginia City and Alden, about twelve miles. Karl Elling is Pres. and Thomas F. Mullaney, 2396 Third Ave., Virginia City, is Ch. Engr.

KANSAS CITY, MO.—The Kansas City, Clay County & St. Joseph R. R. Co. has purchased a right-of-way from this city to St. Joseph and it is reported that permission has been granted the company to cross the bridge now being built by the Armour-Swift syndicate.

ST. LOUIS, MO.—The St. Louis, Arcadia & Jefferson County R. R. Co., of St. Louis, has received a franchise to build its tracks in southwest St. Louis. This is part of a plan to build an interurban railway into the district south and west of St. Louis. Noted Feb. 10.

DALLAS, TEX.—The East Texas Traction Co. is preparing to construct an electric railway between Dallas and Terrell, Tex., about 30 miles. The proposed road will traverse a populous section. C. L. Wakefield is interested. J. F. Strickland, Dallas, Tex., is Pres.

LONGVIEW, TEX.—A franchise, it is reported, has been granted to J. C. Turner, Longview, for the construction of a railway over certain streets.

PALESTINE, TEX.—Ralph E. Hoskat, of Dayton, Ohio, and associates are promoting the construction of a system of electric street railway here. They have submitted a proposition to the people of the town agreeing to construct the system if a bonus of $30,000 is given.

GUTHRIE, OKLA.—The Oklahoma Ry. Co. announces through John W. Shartel, Vice-Pres., that the $12,000,000 of bonds recently negotiated by that company will be used to construct extensions of the company's electrict railway systems in this city and Oklahoma City and to construct interurban lines. The interurban line that now runs from Oklahoma City to within six miles of Edmund is to be extended to Guthrie. The line will be finished to Edmund by June 1, it is announced. Noted Feb. 23.

SALT LAKE CITY, UTAH.—The Utah Light & Ry. Co. announces through its Gen. Mgr., Joseph S. Wells, according to press reports, that the following improvements would be made: The Mt. Olivet line will be changed taking it down Seventh South to between Eleventh and Thirteenth East and down Thirteenth to Ninth South. The First South line will run to Mt. Olivet, going down Thirteenth East to Fifth South. From Eleventh East and Twelfth South there will be an extension along what is known as the Upper County road to Holliday. The West Temple St. line will be extended one mile. The line to Lake Breeze, on Second South, which was abandoned some years ago, will be rebuilt.

WALLA WALLA, WASH.—Rights-of-way from the mouth of the White Salmon River to Trout Lake, about 30 miles, are being secured for an extension of the Pacific Light & Power Co. C. S. Walters, of this city, is Gen. Mgr.

GRANTS PASS, ORE.—The Pacific Western Co. has been organized to build a railway from Grants Pass to the Applegate and Williams Valley, with extensions to Josephine Caves. A. D. Bowen, H. L. Chapin, J. W. Hofferlin and J. G. Riggs are interested.

TURLOCK, CAL.—Bids will be received by the Bd. of Trustees until 8 p. m., May 30, for the sale of a franchise to be granted to S. N. Griffith to operate an electric railway in this city. A. G. Elmore is Clk. Noted March 30.

## LIGHT AND POWER PLANTS.

WORCESTER, MASS.—The Connecticut River Transmission Co. has a contract to furnish 600 HP. to the Worcester Pressed Steel Co., at its plant near Barbers Crossing. The Connecticut River Transmission Co. has a contract also with the Morgan Spring Co.

BOSTON, MASS.—Bids will be received until May 2 by A. Sherman, Chn. of the Bd. of Trustees, City Hospital, for one steam engine. Densmore & Le Clear, 88 Broad St., are the Engrs.

SPRINGFIELD, MASS.—Bids will be received until May 1 by Edward A. McClintock, Chn. of the Fire Comn., for additions and alterations, including heating and electric work, to Pine and Cedar Sts. subways. Hammett Seabury, 21 Besse Pl., is Arch.

✚AUBURN, N. Y.—The contract for the construction of a subway in E. Genesee St., from Owasco St. to Hunter Ave., has been awarded to BRAYER BROS., Auburn, at $25,808. Bids were opened April 4. Elbert C. Aldrich is City Engr.

ALBANY, N. Y.—Bids will be received by the State Commission on Lunacy until 3 p. m., May 10, for fire escapes at the Central Islip State Hospital, Central Islip, N. Y.; also for additional equipment: one direct-connected engine and A. C. dynamo, and changes in switchboard at same institution. T. E. McGarr is Secy. of Commission.

The bids received on April 18 by the Trustees of Public Buildings for steam and electrical equipment of the new Capitol boiler and power house were: Steam equipment: Gillis & Geohegan, New York, $212,558; alternate bid, $207,777. G. A. Sutter & Co., New York, $218,500; alternate bid, $212,100. John W. Danforth, Buffalo, N. Y., $221,975; alternate bid, $216,975. Blake & Williams, New York, $222,947; alternate bid, $215,947. Baker, Smith & Co., New York, $224,946; alternate bid, $220,170. R. T. Ford Co., Rochester, N. Y., $226,900; alternate bid, $219,000. Edward Joy Co., Syracuse, N. Y., $233,000; alternate bid, $228,000. E. Rutzler Co., New York, $258,267; alternate bid, $260,507. Supplemental bid: John W. Danforth, Buffalo, N. Y., $217,100; alternate bid, $216,000. Electrical equipment: Lord Electrical Co., New York, alternate bids: $107,400, $106,200, $102,800. R. T. Ford Company, Rochester, N. Y., $115,525, $114,375, $111,643. Edward Joy Co., Syracuse, N. Y., $126,800, $124,000, $122,000. F. B. Ware is State Arch.

NEW YORK, N. Y.—All bids received by the Department of Public Charities, March 23, for furnishing material and construction of subway for conduit and electrical cables for lighting buildings and streets of the upper division of the New York City Home for Aged and Infirm, Blackwell's Island, have been rejected. Michael J. Drummond is Comr.

✚NEW YORK, N. Y.—The contract for four engines to be installed by Kops Bros., Irving Pl. and 16th St., has been awarded to the BALL ENGINE CO., Erie, Pa. Noted on April 20.

NEW YORK, N. Y.—Bids will be received by the Superintendent of School Buildings, Park Ave. and 59th St., New York, until 11 a. m., May 8, for installing electric equipment in new Public School 165, on Hopkinson and Lott Aves. and Amboy St., Borough of Brooklyn; and for Item 1, installing heating and ventilating apparatus, and Item 2, installing temperature regulation in new Public School 168, on the westerly side of Throop Ave., between Bartlett and Whipple Sts., Borough of Brooklyn; for installing electric equipment in new Public School 95, on West Houston and Clarkson Sts., about 125 ft. east of Hudson St., Borough of Manhattan. C. B. J. Snyder is Supt. of School Buildings.

✚RIVERHEAD, N. Y.—The Riverhead Electric Light Co. has awarded the contract for the installation of a street lighting system to OVERTON & TUTHILL, of Riverhead, N. Y.

VINCENTOWN, N. J.—The water company is considering the installation of a generator to supply electricity for lighting the town.

HARRISBURG, PA.—Charters for five electric companies to supply electricity for light, heat or power in districts of Chester and Montgomery Counties have been issued, the capital of each being $5,000, with the same incorporators. The companies take the names of the districts in which they are designed to operate, as follows. Suburban, of East Coventry; Suburban, of East Pineland, and Suburban, of East Vincent Townships, in Chester County; Suburban, of Upper Providence, and Suburban, of Limerick Township, Montgomery County. The offices are in Pottstown.

✚EASTON, PA.—The contract for the construction of a power house to be built by the General Chemical Co. has been awarded to GILPIN-GUERNSEY CO., at $50,000.

PHILADELPHIA, PA.—Edwin H. Vare was the only bidder for the work in connection with the illumination scheme for South Broad St. boulevard. The work is to be done under the supervision of the electrical bureau. Four lines of electric conduits are to be laid for cable to feed 420 tungsten lamps and 190 arc lights. Ornamental standards will be used. The bid submitted was $69,900.

STEELTON, PA.—The Steelton Light, Heat & Power Co. has appointed a committee to locate a site on which to erect an auxiliary plant having 400-HP. dynamo. The office of the company will also be moved into more

commodious quarters and a new sub-station will be erected and equipped. Samuel Canffer, Steelton, Pa., is Pres.

UNION CITY, PA.—The Keystone Electric Light Co. has been granted a franchise to erect poles and string wires in the streets here and will build an electric light plant. L. D. Shreve is a promoter.

SYKESVILLE, MD.—The Governor of Maryland will receive bids at his office in the Union Trust Bldg., Baltimore, Md., until noon, May 8, for the construction of a power house; also a building known as Cottage "E," women's group, at Springfield State Asylum. Plans and specifications may be seen at the office of Parker, Thomas & Rice, Archs., Union Trust Bldg., Baltimore.

WASHINGTON, D. C.—Bids will be received by the District Commissioners until 2 p. m., May 1, for furnishing and delivering 830 cast-iron lamp posts and accessories of special design. Specifications and drawings may be obtained at the office of the Property Clk., Room 320, District Bldg.

WASHINGTON, D. C.—Bids will be received until 11 a. m., May 13, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for electric lighting machinery and accessories at the U. S. Marine Corps Rifle Range here. Specifications are on file at the office of Engineering News.

FALLS CHURCH, VA.—The Arlington Electric Co. will purchase its energy, probably, from the Alexander Electric Co., erect pole lines, place transformer stations, and distribute current to surrounding towns. M. E. Church, Falls Church, Va., is Pres. and Gen. Mgr. Noted on March 23.

HAMPTON, VA.—The Newport News & Old Point Ry. & Electric Co. will improve its power plant. One 575-HP. boiler will be installed. W. J. Payne, Richmond, is Pres.

DURHAM, N. C.—The Southern Power Co. has purchased a lot of four acres from Brodie L. Duke, upon which it will build its distributing station when its lines of high voltage reach Durham. About 20,000 available horsepower in Durham, 3,500 of which is supplied in emergencies by the Durham Traction Co., will be the prospect of the new company. A steam plant, which will cost $250,000, will be erected later.

GREENVILLE, N. C.—The American Spinning Co. will install the electric drive to displace steam power in its No. 1 mill. This change will require the installation of a 600-HP. motor and contract for this machine has been awarded. The electricity will be obtained from the Greenville transmission lines of the Southern Power Co., of this city. The American plant has about 52,500 spindles and 1,100 looms on yarn and cloth production.

CHESTERFIELD, S. C.—The Chesterfield Light & Power Co. has been incorporated by W. D. Craig, D. P. Douglas and J. H. Welsh. Bids will be received by W. D. Craig for construction and installation of machinery for an electric-light plant.

COLUMBIA, S. C.—The Columbia Gas Light Co. is contemplating making improvements. It is stated the company has increased its capital for this purpose.

CARTERSVILLE, GA.—The Blue Ridge Power Co. is contemplating the construction of a dam, 150 ft. high, to develop 30,000 HP. for transmission by electricity. J. J. Spalding, Atlanta, Ga., and Wm. A. Carlisle, Gainesville, Ga., are interested.

FAIRBURN, GA.—Bids will be received by W. B. Green, City Clk., about May 1 for the construction of an electric-light plant. Estimated cost, $10,000.

COLQUITT, GA.—A municipal electric light plant will be built at an estimated cost of $75,000. Bonds for $22,500 have been voted. P. E. Wilkin is Mayor.

JACKSONVILLE, FLA.—Bids will be received by W. M. Bostwick, Jr., Chn. of the Trustees for Water-works and Improvement Bonds, until May 4, for building superstructure, including brick work, roofing, mill work, plumbing, heating, etc., for municipal power station. The form of contract is on file in office of board in Jacksonville and of Scofield Engineering Co., Consult. Engrs., Philadelphia, Pa.; plans and specifications on file in office of Bd. and of Consult. Engrs.

NEW IBERIA, LA.—The Teche Land Co. has purchased a site of 100 acres on which to erect an electric light plant, a sewerage plant and will install a water supply system.

GALLATIN, TENN.—Bids will be received at the office of E. L. Anderson, Chn. of Water and Light Com., until noon, May 5, for Corliss engine, two 100-KW. alternating-current three-phase engine-type generators, two marble switchboards, two electrically-operated pumps of plunger or multi-stage centrifugal types, of 500 gallons per minute capacity. Specifications and other information may be had at the office of E. L. Anderson.

BURLINGTON, KY.—Bids will be received by N. E. Riddell, Burlington, Ky., until noon, May 13, for installing a steam-heating plant in the court-house in Burlington, Ky. Plans and specifications may be seen at the office of N. E. Riddell.

AKRON, OHIO.—The Northern Ohio Traction & Light Co. have decided to develop their water power on the Cuyahoga River near this city. H. von Schon, Consult. Engr., Detroit, Mich., is preparing plans and specifications.

TOLEDO, OHIO.—Bids will be received until 12 M., May 15, at the office of the Clk. of the Bd. of Education, Toledo, Ohio, for the installation of an electric light and power system, interior telephone system and an electric time clock and program Bell system, in either or both school buildings now in the course of construction known as the Morrison R. Waite High School at East Broadway, Kelsey Ave. and Second St., and the Jessup W. Scott High School, on the school site on Collingwood Ave., between Winthrop and Machen Sts. Plans, specifications and other information may be had at the office of the Department of Architecture of the Board of Education. George L. McKesson is Director of Schools.

BARBERTON, OHIO.—The City Council has adopted an ordinance granting the Barberton Light & Power Co. a franchise in the city's streets for a period of eight years.

ELWOOD, IND.—The Bacon-Olds Co. is preparing to build an artificial gas plant in this city.

HASTINGS, MICH.—The citizens have voted to issue $120,000 bonds for the construction of a water-power plant. James M. Patten is City Clk.

MILO, IOWA.—Bonds for the establishment of a municipal gas lighting plant have been voted.

NASHWAUK, MINN.—Bids will be received by John Carlson, Village Clk., until May 1, for furnishing a number of direct-current electric meters. Bids may be submitted for both new and second-hand.

WABASHA, MINN.—Plans are on foot for the establishment of the Minnesota Wisconsin Power Co. to furnish light and power to the cities of Wabasha, Lake City, Red Wing, Hastings and Winona. Current will be furnished from the plant in this city, which will be enlarged to meet the increased demand.

LEAVENWORTH, KAN.—Bids will be received until 10 a. m., May 9, for furnishing and delivering at the U. S. penitentiary at Leavenworth, Kan., one 750-HP., boiler feed, water heater and receiver, with provision for purifying the surplus exhaust steam passing to the heating system. Specifications, with further information, may be had at the office of R. V. Ladow, Supt. of Prisons, Washington, D. C.

PIERRE, S. DAK.—The State Capital Comn. has awarded the contract to WARREN COPPAGE & CO., Pierre, for gas tank and engine. The estimated cost is $15,000.

HANKINSON, N. DAK.—The Phillips-Carleton Electric Co. has been incorporated and has been granted a charter to build an electric light plant. M. E. Phillips and E. L. Carleton, both of Jamestown, N. Dak., are the incorporators.

CHILLICOTHE, MO.—Bids will be received May 8 for the construction of a light and power plant and drilling a deep well. John H. Taylor is Mayor.

FORT BLISS, TEX.—Bids for furnishing and installing electric lighting system will be received by Lieut. G. V. S. Quackenbush, Constr. Q. M., U. S. A., Fort Bliss, until 11 a. m., May 1.

✚GALVESTON, TEX.—The Federal Government, through Major C. P. Howell, U. S. Engr., in charge of the Galveston district, has awarded the contract for laying the telephone, electric light and power cables and an 8-in. water main on the dike from a point opposite Fourteenth St. to the site of the government immigrant station to C. K. SPALDING and THAD PARSONS.

MISSION, TEX.—The Mission Land & Improvement Co. will install an electric light and power plant and a complete water-works system here. The company has also taken steps to install an ice and pre-cooling plant.

EAGLE DAM, TEX.—Bids will be received until 2 p. m., May 15, at the office of the Reclamation Service, Los Angeles, Cal., for furnishing a steam power plant for Rio Grande Project, N. Mex., Tex. It will consist of three 625-K.V.A. steam turbo-generator units; two steam turbine-driven exciters controlling switchboard, including three feeder panels; three condensers with circulating air pumps; four water-tube boilers; two boiler-feed pumps; one feed-water heater; steam and feed-water piping, and all other apparatus and appurtenances necessary for the complete installation of the steam-electric power plant. It will be required to furnish power for derricks, cableways, hoists and heavy excavating machinery under the ordinary conditions met in construction work.

KINGFISHER, OKLA.—A bond issue of $28,000 has been voted to enlarge the municipal electric light plant. The electric system will be changed from a single to a 3-phase. The water-works will also be extended. V. H. Francis, Kingfisher, is Supt.

SENTINEL, OKLA.—A bond issue of $12,000 has been voted by the citizens to be used for the erection of an electric light plant. Bids will be received until April 28 for the bonds. J. M. Terry is Town Clk. T. Murch, Clinton, Okla., is Engr.

KELSO, WASH.—The Washington-Oregon Corporation has been granted franchises to supply this city with water and light for a period of 50 years. The city has reserved the privilege of readjusting rates every five years.

PORT ORCHARD, WASH.—Bids will be received by the State Bd. of Control at Olympia about May 20 for the construction of a power plant in connection with the new hospital at the Veterans' Home to be built here.

RIVERSIDE, CAL.—A franchise has been applied for by the Pacific Light & Power Co., through its Atty., Hugh H. Craig, to erect a power system through all roads in the county outside of incorporated towns. Bids for the sale of the franchise will be received by the Bd. of Supervisors until May 24.

SACRAMENTO, CAL.—The Citizens Light & Power Co. has been incorporated by Geo. Peltier and others to construct a generating plant and supply electric current for light and power, also gas. Capital, $2,500,000.

SAN BERNARDINO, CAL.—The Southern California Gas. Co. has made application for a franchise to construct gas mains and laterals on all the roads within the county. Estimated cost, $100,000.

✚PASADENA, CAL.—The City Council has awarded a contract to S. M. KERNS, of Los Angeles, for constructing the underground conduit system for electric light and telephone wires, on South Orange Grove Ave., at $33,700.

## BRIDGES.

*(✚Denotes a contract awarded.)*

BARNSTABLE, MASS.—Bids for the construction of a reinforced-concrete bridge with steel draw span over West Bay in the town of Barnstable, will be received at the office of F. C. Wales, Engr., 8 Beacon St., Boston, until noon, April 29. The bridge will be 289 ft. long and 20 ft. wide. Plans, specifications and further information may be had at the office of the Engineer.

BOSTON, MASS.—An appropriation of $125,000 has been granted and $63,000 more is expected for rebuilding the Meridian St. bridge. Louis K. Rourke is Comr. Pub. Wks.

PITTSFIELD, MASS.—The following bids have been received by the Board of Public Works for the construction of the Elm St. bridge across the east branch of the Housatonic River: H. C. Wood & Co., Westfield, Mass., (a) $12,855 and (b) $25 per cu. yd. for extra concrete; George W. Rankin, Schenectady, N. Y., (a) $13,731, (b) $10; D. J. Walsh, Pittsfield, Mass., (a) $14,686, (b) $20; Beaver Construction Co., Pittsfield, Mass., (a) $18,332, (b) $9; Simpson Bros., Boston, Mass., (a) $16,099, (b) $9; Sperry Engineering Co., New Haven, Conn., (a) $15,740, (b) $15; David Dwyer & Co., Dalton, Mass., (a) $14,495, (b) $10; Fred T. Ley & Co., Inc., Springfield, Mass., (a) $20,500, (b) $.0. The bridge will be a concrete structure 63 ft. wide and 60 ft. span. One-third the cost will be borne by the Berkshire St. Ry. Co.

SPRINGFIELD, MASS.—The Board of Public Works has recommended that the contract for building the Elm St. bridge be awarded to George Van Vranken, Schenectady, N. Y., who was the second lowest bidder at $13,731. The lowest bidder was H. C. Wood & Co., Westfield, who bid $12,875.

NEW YORK, N. Y.—Bids will be received by the Commissioners of Bridges until 2 p. m., June 1, for strengthening the end spans of the Williamsburg Bridge, over the East River, between the Boroughs of Manhattan and Brooklyn. Kingsley L. Martin is Comr.

✚JERSEY CITY, N. J.—JOSEPH MURPHY & SON, INC., has been awarded the contract for the Central Railroad bridge, to be constructed of concrete and steel, at their bid of $83,990. The next two lowest bidders were Heninan, Delahanty & Ferris, $86,300, and H. H. Holmes, $87,000. The VULCAN RAIL & CONSTRUCTION CO., of Brooklyn, N. Y., was awarded the contract for repairing the Pennsylvania Railroad bridge at $6,642.

JERSEY CITY, N. J.—Bids will be received by the Board of Chosen Freeholders of the County of Hudson until 3 p. m., May 4, for constructing a highway bridge over the Morris Canal at Communipaw Ave.

✚ALTOONA, PA.—The contract for constructing a reinforced-concrete arch bridge, 75-ft. span, over the Juniata River, between Hollidaysburg and Gaysport, has been awarded to FOGLE & CO. at $12,917. The other bidders were: Ferro Concrete Co., $14,537; C. J. Carothers, $12,720; McLaughlin & Trefall, $12,987; C. D. Hughes, $16,220; Nelson-Merydith Co., $13,832; Lanner Bros., $23,964; Vipond Construction Co., $13,096.

BUTLER, PA.—Bids will be received by the County Commissioners until noon, May 9, for constructing the following bridges: Rockdale bridge, over Thorn Creek, in Penn Township, masonry substructure and steel superstructure; Allen Mill bridge, over Semicona Run to Connoquenessing Township, stone substructure and steel superstructure; Keefer bridge, over Crab Run, in Lancaster Township, stone substructure and steel superstructure; Chances Run bridge, over Chances Run, in Parker Township, stone substructure and steel superstructure; McMurry bridge, over branch of Slipperyrock Creek, in Cherry Township, stone substructure and steel superstructure; Sweezy bridge, over Fowlers Run in Allegheny Township, stone substructure and reinforced-concrete superstructure; Karns City bridge, over Riddles Run, in the borough of Karns City, concrete substructure and reinforced-concrete superstructure; Downieville bridge, over Breakneck Creek, in Adams Township, concrete substructure and reinforced-concrete superstructure. W. B. Scott is Clk. Comrs.

CHAMBERSBURG, PA.—Bids will be received by the Commissioners of Franklin County, E. K. Raff, Clk., until 11 a. m., April 28, for erecting a reinforced-concrete bridge over Wilson Run in St. Thomas Township.

✚*EASTON, PA.—Press reports state that the contract for constructing a reinforced-concrete bridge over the Lehigh River at Easton has been awarded to the FERRO CONCRETE CO., Harrisburg, Pa., at $109,950. Noted on April 20.

✚PITTSBURG, PA.—We are officially advised that the contract for erecting the Larimer Ave. reinforced-concrete bridge, span 312 ft., was awarded on April 22 to BOOTH & FLINN, LTD., Forbes and Jumonville Sts., Pittsburg, at $139,932.

BALTIMORE, MD.—The State Roads Commission, Union Trust Bldg., Baltimore, will receive bids until May 10 for the construction of a concrete bridge over Rock Creek in Montgomery County, and others.

RICHMOND, VA.—Bids will be received until noon, May 1, for constructing a 119-ft. bridge across South Anna River at the "Ground Squirrel," 15 miles from Ashland, according to plans and specifications on file at office of State Highway Commission and of Clerk at Hanover, Va. P. St. J. Wilson is State Highway Comr.

✚RICHMOND, VA.—Press advices state that the contract for the James River bridge has been awarded to I. J. SMITH & CO., at $232,061.

MACON, GA.—The Macon, Dublin & Savannah R. R. Co. contemplates the construction of a bridge at a probable cost of $225,000. J. T. Wright, Macon, is Gen. Mgr.

SHREVEPORT, LA.—B[illegible] probably be asked within a month [illegible] Shreveport Commissioners for con[illegible] a traffic bridge over Red River, [illegible] at $250,-000. George Wilson is [illegible] and Ira G. Hedrick, Kansas City [illegible] Engr.

✚*PADUCAH, KY.—W[illegible] officially advised that the contract [illegible] constructing a reinforced-concrete bridge [illegible] wide and 295 ft. long, was awarded [illegible] April 17 to J. A. OMBURG, Memphis, [illegible] at $30,000. The other bidders were: [illegible] Contractor Co., Nashville, Tenn., $39,062; [illegible] Hancock Co., Louisville, Ky., $35,770; [illegible] Standard Concrete Construction Co., Chicago, [illegible] $32,0[illegible]; Nashville Bridge Co., Nashville, [illegible] $34,800; Davis-Hoys Construction [illegible] Paducah, $33,339.

LOUISVILLE, KY.—Estim[illegible] have been completed by D. R. Lyman, [illegible] Engr., for constructing three viaducts o[illegible] the crossings on Third and Fourth A[illegible]. The total cost will be about $225,000.

COLUMBUS, OHIO.—Bids w[illegible] received by the Commissioners of F[illegible] County until noon, May 16, for cons[illegible] the approaches and substructure [illegible] bridge over Olentangy River [illegible] Wilson M. Sayre is County Audr.

✚DAYTON, OHIO.—The con[illegible] for building the double-span concrete [illegible] at Germantown has been awarded [illegible] County Commissioners to CHARLES [illegible]RD, at $6,295.

GOSHEN, IND.—Bids will b[illegible] received by the Commissioners of Elkhart [illegible] until May 2, for constructing a stee[illegible] bridge over Rock Run, estimated at $7,000.

WASHINGTON, IND.—Bids [illegible] be received by the Commissioners [illegible] Daviess County until May 8 for the con[illegible] construction of seven concrete bridges.

BLUFFTON, IND.—Bids wi[illegible] be received by the Commissioners of Wells County until May 4 for the repair and construction of 15 bridges and arches. Plans and specifi[illegible] Ganett, County Audr. Each bid must be [illegible] Ganett, County Audr. Each bid shall be accompanied with approved bond equal to amount of bid.

LAPORTE, IND.—Bids will be received by the Commissioners of Laporte County until May 4 for constructing a concrete box culvert in Pleasant Township, an iron bridge with concrete abutments in Springfield Township and the Schacht culvert in Coolspring Township. Fred A. Haushur is County Audr.

LEBANON, IND.—Bids will be received by the Commissioners of Boone County until 1 p. m., May 2, for the construction and repair of two bridges. B. F. Herdr[illegible]h, Audr.

PRINCETON, IND.—Bids will be received by the Commissioners of Gibson County until 11 a. m., May 3, for constructing twelve steel bridges. W. T. Roberts is County Audr.

RICHMOND, IND.—Bids will be received by the Commissioners of Wayne County until 11 a. m., May 1, for constructing the following bridges: Beeler bridge, Center Township, concrete, length, 240 ft.; D. W. Harris bridge, Clay Township, concrete, length, 70 ft.; Lannerd bridge, Jackson Township, concrete, length, 70 ft.; Simpson bridge on line between Jefferson and Harrison Township, concrete twin spans of 66 ft.; Wright culvert, Abington Township, concrete, length, 16 ft. Demas S. Coe is County Audr.

SHELBYVILLE, IND.—Bids will be received by the Commissioners of Shelby County until 10 a. m., May 2, for the construction of four concrete steel culverts. G. B. Huntington is County Audr.

SULLIVAN, IND.—Bids will be received until May 3 for the construction of seven steel bridges. B. C. Crowder is County Audr.

✚*BATAVIA, ILL.—We are officially advised that the contract for constructing a temporary bridge across Fox River, removing the present structure, and building a new reinforced-concrete bridge, 270 ft. long and 60 ft. wide, was awarded on April 20 to CARL J. EKMAN & JOHN MACKIMMIE at $30,500. The other bidders were: Cornelius Collins, Batavia, Ill., $44,000; Sauber & Paulson Construction Co., Lockport, Ill., $37,200; Cullen & Friedstedt Co., Chicago, Ill., $45,000; Pitts & Dougherty, Lockport, Ill., $41,700; Joliet Bridge & Iron Co., Joliet, Ill., $37,800; John J. O'Heron & Co., $38,100; The Gould Construction Co., Davenport, Iowa, $36,750; Wolcott-Jones Construction Co., Batavia, Ill., $33,150. Noted on March 30.

CHICAGO, ILL.—The Auditor is selling the $4,655,000 of bonds recently voted for bridge construction, and bids will probably be asked in about a month. John Ericson is City Engr. and L. E. McGann is Comr. Pub. Wks.

BOONE, IOWA.—Announcement has been made that the Fort Dodge, Des Moines & Southern Interurban Co. will soon begin the erection of a steel viaduct over the Des Moines River near Boone, to shorten the route between Boone and Fraser 1½ miles.

BROOKSTON, MINN.—Preliminary plans have been prepared for a steel bridge to cost $8,585.

HOUSTON, TEX.—The bond issue of $500,-000 which was authorized by the taxpayers of Houston several weeks ago for the construction of a viaduct across Buffalo Bayou on Main St. has been purchased by the South Texas National Bank of Houston. The City Engineer is preparing the plans and specifications for the proposed structure and bids will soon be called for its construction. The viaduct will be built of reinforced concrete and paved with vitrified brick. Space will be allotted for two street railway tracks, a vehicle roadway and two sidewalks for pedestrians. The length of the structure will be 1,600 ft. and the width 60 ft.

✚MACKAY, IDAHO.—We are officially advised that the contract for constructing a steel bridge over Salmon River has been

awarded to CHARLES G. SHEELY, Denver, Colo., at $14,890 and $18,390. Noted on March 16.

✚PORTLAND, ORE.—The contract for the steel work on the new Harriman bridge over the Willamette River at Flanders St. has been awarded to ROBERT WAKEFIELD, at $232,[illegible]

## BUILDINGS.

*(*Denotes that this work is advertised in Engineering News.)*

PITTSFORD, VT.—Bids will be received until May 6 at the office of Henry L. Rourke, Hildreth Bldg., Lowell, Mass., for the construction of a school.

BOSTON, MASS.—Bids will be received until May 8 for the construction of an elementary school—school in Lyman School Dist., East Boston. Charles Logue, 110 Boylston St., is Chn. School House Comn.

BOSTON, MASS.—The architect chosen for the City Hall annex, to cost about $800,000, is Edward T. P. Graham, 20 Beacon St., Boston, Mass.

GREAT BARRINGTON, MASS.—The committee in charge of the erection of the new Mason Library, which is to cost about $50,000, has decided to hold a competition to secure plans for the building, and have engaged Prof. Warren P. Laird, of the University of Pennsylvania, as advisor in connection with the contest. All architects interested should communicate with Mr. Laird. Four of those who submit plans will receive compensation.

✚MT. HERMON, MASS.—The contract for the erection of the new Clossley Hall at the Mt. Hermon School for Boys has been awarded to the H. WALES LINES CO., of Meriden, Conn. The plans were drawn by Parish & Schroeder, 12 West 31st St., New York, N. Y., and call for a building 47 × 397 ft., five stories high, of Harvard brick with Vermont marble trim, reinforced-concrete floors and brick and terra cotta partitions.

✚SPRINGFIELD, MASS.—Contracts for the central heating plant in connection with the new municipal buildings have been awarded as follows: For the building, A. E. STEPHENS CO., Springfield, Mass., at $46,495; for the heating, GEORGE H. McCLEAN CO., Springfield, Mass., at $9,700; for the electrical work, M. B. FOSTER CO., Boston, Mass., at $10,500.

SWAMPSCOTT, MASS.—The erection of a 12-room schoolhouse was lately decided upon at a town meeting. W. H. Bates is Chn. Selectmen.

PAWTUCKET, R. I.—J. H. Adams, 12 Weybosset St., Providence, R. I., is preparing plans for a clubhouse on Mineral Spring Ave. for the Lorraine Manufacturing Co. The building will be of brick, 63 × 84 ft., 2½ stories high and will cost about $45,000.

BATAVIA, N. Y.—A bill has been introduced in Congress providing for the construction of a Federal building here to cost $100,000. The site for its erection has already been secured.

BUFFALO, N. Y.—Henry L. Spann, Pascal St., has completed plans for a store building, 40 × 200 ft., brick and steel, at 671 Main St., extending to Washington St., to be erected by Charles Berricks Sons, 1151 Main St.

✚The contract for construction of the hospital building, 50 × 192 ft., 4-story and basement, to be erected on Riley St. by the German Deaconess' Society, Rev. C. G. Haas, Pres., has been let to METZ BROS., 1295 Fillmore Ave., at $125,000.

Colson & Hudson, 35 Dun Bldg., are preparing plans for a 4-story and basement store and office building, 62½ × 100 ft., brick and steel, to be erected at 733-737 Main St. by Allen E. Klopp, 107 Erie County Bank Bldg. Estimated cost, $55,000.

Colson & Hudson, 35 Dun Bldg., are completing plans for a 3-story and basement store and office building, 44 × 100 ft., to be erected at 515-519 Main St. by John H. Smith, Dun Bldg.

NIAGARA FALLS, N. Y.—Mayor Philip J. Keller has named Public Works Commissioners Charles J. Ohrt and C. E. Cromley to serve with himself as a committee to investigate the cost of a new municipal building on the site of the present Convention Hall.

ITHACA, N. Y.—Green & Wicks, 110 Franklin St., Buffalo, have completed designs and working plans under direction of State Arch. Franklin B. Ware, Albany, for a Home Economic Building, 70 × 140 ft. 4 stories and basement, containing kitchens, bakery, cafeteria, laundry, etc., to be erected by Cornell University; structural steel, pressed brick and terra cotta. Estimated cost, $150,000.

*KINGS PARK, N. Y.—Bids for additional plumbing and tile floors, Group No. 1, construction and plumbing, at the Kings Park State Hospital, Kings Park, N. Y., will be received by the State Commission in Lunacy, 53 Lancaster St., Albany, N. Y., until 3 p. m., May 3. T. E. McGarr is Secy. (For further details see advertisement).

LITTLE FALLS, N. Y.—David H. Burrell, Little Falls, will build a clubhouse for the young men of the city at a cost approximating $100,000. Bids will be received on May 1.

OLEAN, N. Y.—The Board of Education has declared its intention of building a Trades School to cost about $42,000. A proposition to bond the city for that amount is proposed for submission to the voters at a special election next fall.

YONKERS, N. Y.—Woodstock College, of Baltimore, Md., has purchased the 55-acre Lilienthal Estate on North Broadway, and will remove here. An outlay of close to a million dollars for buildings is reported as contemplated.

✚AMSTERDAM, N. Y.—The contract has, according to press reports, been awarded to the McSHAYNE CONSTRUCTION CO. for the construction of St. John's Roman Catholic Church. The estimated cost is $50,000.

MT. VERNON, N. Y.—The Stainach-Hords Co. has purchased the Miller estate through George W. Bard, 28 to 32 South Fifth Ave., Mount Vernon, and will erect a theater on the site. The estimated cost is $50,000.

✚SARATOGA SPRINGS, N. Y.—The contract has been awarded to LEWIS & BURROUGHS, Schenectady, N. Y., for the construction of a school to replace school in District No. 4. The probable cost is $45,000.

TROY, N. Y.—The Board of Directors of the Samaritan Hospital has received an offer from Miss Alida Van Schoonhoven, Troy, to construct a memorial building and provide a site of several acres for the construction of a hospital plant, and an offer from George B. and Robert Cluett to erect and equip a new hospital complete. It is estimated that the two offers contemplated involve an expenditure of $300,000 or $400,000.

✚NEW YORK, N. Y.—The contract has been awarded to JACOB KERNER, 31 East First St., for the construction of a tenement building at 45-51 Ave B. Horenburger & Bardis, 122 Bowery, are the Archs. Sub bids will be received by the contractors.

Charles S. Clark, 441 East Tremont Ave., is preparing plans for the construction of two 5-story tenements at 180th St., west of Honeywell Ave. The estimated cost is $70,000. The Sellitti Construction Co., 1118 Intervale Ave., is the owner.

✚The contract has been awarded to THOMAS J. BRADY, JR., 1170 Broadway, for the construction of two 6-story fireproof buildings at 415-421 West 55th St. Plans were prepared by F. M. Small, 265 Broadway.

Plans are being prepared by Charles S. Clark, 441 East Tremont Ave., for the construction of four 5-story tenement buildings on the west side of Park Ave., 200 ft. south of 187th St. The estimated cost is $125,000. The Tremont Realty Co., 1692 Monroe St., is the owner.

Plans are being prepared by Moore & Landsiedel, 148th St. and Third Ave., for the erection of a 5-story apartment building on the northeast corner of Audubon Ave. and 186th St. The estimated cost is $50,000. The Hogensauer Wesslav Co. is the owner.

Plans have been completed by Gronenberg & Leuchtag, 7 West Second St., for the construction of three 5-story tenement buildings on the southwest corner of 186th St. and Audubon Ave. The estimated cost is $135,000. H. G. Realty Co., 127 West 24th St., is the owner.

The Hogansauer & Wesslav Co. will erect at 186th St. and Audubon Ave. a 5-story flat building. Moore & Landsiedel, 148th St. and Third Ave., are the Archs. The estimated cost is $80,000.

A 9-story elevator apartment house will be erected at Fifth St., 250 ft. west of Eighth Ave. The estimated cost is $75,000. Schwartz & Gross, 347 Fifth Ave., have prepared the plans.

John Hauser, 360 West 125th St., has prepared plans for the construction of a 5-story tenement building to be erected on Morris Ave., 85 ft. south of Tremont Ave. Jacob Shiepel, 1099 Morris Ave., is the owner.

A 5-story brick tenement building will be erected at 175th St. and Vyse Ave. for the Nelson Black Construction Co., 1081 Tremont Ave. Moore & Landsiedel, 148th St. and Third Ave., are Archs.

Plans have been prepared by Samuel Sass, 32 Union Sq., for the erection of a 6-story tenement building to be constructed by the Riverview Construction Co., 594 Broadway, at 158th St., 225 ft. east of Broadway. The estimated cost is $50,000.

The Trinity Church Corporation, 187 Fulton St., has awarded the general contract to CHARLES H. PECKWORTH, 415 Hudson St., to construct the proposed printing house at 405-421 Hudson St., for Charles Schweinler Press, 141 East 25th St. Renwick Aspenwall & Tucker, 320 Fifth Ave., prepared the plans.

Plans have been prepared by Shampan & Shampan, 772 Broadway, Brooklyn, for the construction of a 4-story apartment house to be erected on the west side of Rodney St., 98.4 ft. south of Bedford Ave.

Plans are being prepared by John P. Leo, 770 St. Nicholas Ave., for the erection of a 10-story elevator paramtment building at 160th St. and St. Nicholas Ave.

The general contract has been awarded to CRAMP & CO., 25 East 26th St., New York, for the erection of a warehouse and office building on the east side of West St., between Milton and Noble Sts., Brooklyn. The American Manufacturing Co., 65 Wall St., is the owner. Plans were prepared by William Higginson, 13 Park Row, New York City.

Plans have been filed by F. A. de Neuran for the construction of a 4-story parochial school for the Roman Catholic Church of the Ascension on the south side of 108th St. The Rev. Father Sweeney is Rector. The estimated cost is $120,000.

✚The contract has been awarded to LEDDY & MOORE, 105 West 40th St., New York, N. Y. A 12-story structure will be erected at 4 West 38th St., and a 5-story connecting building at 416 Fifth Ave. The floors of the new Fifth Ave. building will be on the same level as those in the present Simon Building, at 414 Fifth Ave., but the roof of the old building will be raised several feet.

Plans have been filed for the erection of a 6-story store and loft building. McKim, Mead & White, 160 Fifth Ave., are Archs. A. C. Pollifeine is owner. The estimated cost is $40,000.

✚The contract for the construction of the Woolworth Building, at Broadway, Park Pl. and Barclay St., has been awarded to the THOMPSON - STARRETT CONSTRUCTION Co., Municipal Bldg., Park Row and Centre St. The structure will contain four sets of interior staircases, entirely independent of each other, and an outside iron stairway. The 29 elevator shafts will be fireproof, being self-contained and isolated from the corridors by iron doors.

Plans have been filed for the construction of a 12-story loft building at 46th St. and Sixth Ave. The Helenita Realty Co. is owner. Emery Roth, 20 East 42d st., is Arch. The estimated cost is $155,000.

Plans have been filed for the construction of a 2-story stable, storehouse and garage, 90 × 40 ft. City is the owner. I. M. de Verona is Arch. The estimated cost is $50,000.

Plans have been filed for installing a waiting room and a ticket office in the Pennsylvania Terminal at Seventh and Eighth Aves., and 31st to 33d Sts. This will be for the use of the Long Island section, and has been estimated to cost $40,000.

✚The contract has been awarded to THOMPSON - STARRETT CO., Municipal Bldg., Park Row and Center St., for the construction of a 25-story store and office building to be erected on the south side of Maiden Lane, 151.9 ft. east of William St., running through the block to Cedar St., for the Five Companies Building Corporation. Henry Evans is Pres. The probable cost is $1,000,000. D. H. Burnham, Chicago, Ill., is Arch.

Plans have been filed for the New York Telephone Co. by Cyrus L. W. Eidlitz & McKenze, 1123 Broadway, and Voorhees & Gamelin. The proposed structure will be seventeen stories high, 124.9 × 88.7 ft., and located at 18 to 26 Walker St., through to 18 to 24 Lispenard St. The estimated cost is $1,400,000.

A 4-story and basement dwelling, 27 × 30 ft., on the northeast corner of Park Ave. and 73d St., will be erected by Oakligh Thorn, Pres. of the Trust Co. of America. The estimated cost is $80,000. Plans have been filed by Albert Joseph Bodker, 25 West 32d St.

Bids will be received until 3 p. m., May 9, by the Pres. of the Board of Trustees, Staff Room of Bellevue Hospital, for all labor and material required for the excavation, masonry, steel and iron, carpentry, plumbing, heating, electric and all other work for the construction of a workshop to be situated on the extreme northwest corner of Fordham Hospital grounds, situated on the west side of Crotona Ave., 225 ft. north of Pelham Ave., Borough of The Bronx, New York.

Stephen Clark, 149 Broadway, has purchased site, 42 to 46 East 70th St., from Morris Starr through Douglas Robinson, Charles S. Brown Co. A dwelling will be erected on the site.

Bids were received as follows on April 18 by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a building for the Barge Office at New York City: Luke A. Burke & Sons Co., New York, $599,521; Di Beneditto & Egan Construction Co., New York, $642,528; Conners Bros. Co., Lowell, Mass., $663,500; Charles H. Peckworth, New York, $578,924; Thomas Dwyer, New York, $639,500; Northeastern Construction Co., New York, $545,442; George A. Fuller Construction Co., New York, $721,000; New York State Construction Co., New York, $589,981; John F. Brady & Co., New York, $611,840; James Stewart & Co., New York, $715,000; H. C. Stowe Construction Co., Brooklyn, N. Y., $639,000.

✚ATLANTIC CITY, N. J.—JAMES G. DOAK & CO., 1420 Chestnut St., have been awarded the contract for the erection of a group of buildings for the seashore annex of the Widener Home for Crippled Children in Atlantic City. Plans were prepared by Horace Trumbauer, Land Title Bldg., Philadelphia, Pa.

✚JERSEY CITY, N. J.—The TURNER CONSTRUCTION CO., 11 Broadway, New York, N. Y., has been awarded the contract for the construction of a 6-story reinforced-concrete warehouse and powerhouse combined, 60 × 90 ft. in plan, for the Great Atlantic & Pacific Tea Co., Bay and Provost Sts., Jersey City, N. J.

✚NEWARK, N. J.—The contract has been awarded by the Chelsea Security & Investment Co. to the CRAMP & CO., 25 East 26th St., for the coustruction of a fireproof brick, steel and reinforced concrete theater on the west side of Washington St., near Market St. The estimated cost is $140,000. The Henry C. Miner Estate, 1402 Broadway, New York City. McMurray & Pulis, 22 Clinton St., and George Keister, 12 West 31st St., are Asso. Archs.

BRADDOCK, PA.—Bids were received as follows on April 24, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a U. S. post-office building at Braddock, Pa: John G. Unkefer & Co., Minerva, O., $89,365; William H. Fissell & Co., New York, N. Y., $93,000; King Lumber Co., Charlottesville, Va., $98,000; Richard E. Heningham, New York, N. Y., $87,753; Ed. Henry, Catlettsburg, Ky. $81,420; George Hogg Co., Pittsburg, Pa., $85,050; James L. Stuart, Pittsburg, Pa., $91,612; Homestead Lumber Co., Homestead, Pa., $98,365; J. E. & A. L. Pennock, Philadelphia, Pa., $87,380; Plowman Construction Co., Philadelphia, Pa., $78,913; H. A. & C. A. Johnson, Pittsburg, $104,500; Conners Bros. Co., Lowell, Mass., $86,600.

PHILADELPHIA, PA.—Plans have been filed by Wm. J. Doyle & Co. for the erection of the proposed building for the Fire Association at the northwest corner of Fourth and Walnut Sts. The building will be six stories high, 53 × 80 ft., and of fireproof construction.

PHILADELPHIA, PA.—J. E. & A. L. Pennock have plans from Benjamin R. Stevens, arch., for a 4-story building, 94 × 142 ft., at Broad St., and Snyder Ave., for the Baptist Institute for Christian Workers.

John W. Emery and John R. Wiggins & Co. are estimating on plans by Furness, Evans & Co., Philadelphia, for a group of buildings to cost $60,000, for the Odd Fellows' Orphanage at Agontz and Chelton Aves., where a tract of 10 acres was recently purchased.

Sauer & Hahn have been commissioned to design the $700,000 theater which J. Fred Zimmerman will erect at 42-48 West Chester Ave., Germantown.

Stacy Reeves & Sons are taking estimates for an 8-story publication building, 53 × 82 ft., at the northwest corner of 7th and Locust Sts., for the W. B. Saunders Co.

PITTSBURG, PA.—It is reported that negotiations have been completed with the Henry W. Oliver estate for the construction of a 12-story hotel on the site of the Lewis block, and adjoining building at Sixth Ave. and Smithfield St. The estimated cost is about $6,500,000. The structure will be known as the Hotel Oliver. Outside capital has been interested, and upon the Board of Directors will be Gen. T. C. Dupont, of Wilmington, Del., and Charles P. Taft, of Cincinnati, Ohio.

TAMAQUE, PA.—Bids will be received until May 8 by the Harmony Lodge for the construction of a lodge building.

✚HAGERSTOWN, MD.—Plans are being prepared for the proposed clubhouse for the Hagerstown Country Club. Charles C. Easton, is Secy. The estimated cost is $50,000.

WASHINGTON, D. C.—The Union Savings Bank will erect a new bank building after plans prepared by Milburn, Heister & Co., to cost $100,000. Plans now being prepared.

HAMPTON, VA.—The Ocean Beach Development Co. will erect a hotel at Grandview. The estimated cost is $300,000.

NORFOLK, VA.—The Athenian Amusement Corporation, George Christopher, Pres., will construct a theater on a site at 189-191 Granby St., which was recently leased to them for 15 years.

RICHMOND, VA.—Plans are being prepared by Louis Jallade, 37 Liberty St., for the construction of a hotel for William Rueger, Richmond. The probable cost is $250,000.

WELLSBURG, W. VA.—Bids will be received until May 1 by the Board of Education, E. E. Carter, Secy., for the construction of four schools.

WILLIAMSON, W. VA.—Bids will be received until May 10 by Mingo County for the construction of an addition to and remodeling the court house. Estimated cost, $40,000. H. R. Warne, Charleston, W. Va., is Arch.

RAEFORD, N. C.—The Board of County Commissioners of Hoke County selected Milburn, Heister & Co., Washington, D. C., to prepare plans and specifications for new court house to cost $50,000. Plans will be ready in about four weeks.

Hoke County Commissioners selected Architects Milburn, Heister & Co. to prepare plans and specifications for new jail. Contract will be let at same time contract is let for court house.

DILLON, S. C.—Bids will be received until noon, May 9, for the construction of a court house. William Edwards, 632 Chandler Bldg., Atlanta, Ga., is Arch.

ATLANTA, GA.—The Florence Investment Co. will erect a store and apartment building on Peachtree St. The estimated cost is $50,000.

A 13-story office building will be erected by the McKenzie Building Co. on Peachtree St. The estimated cost is $300,000.

*DUBLIN, GA.—Bids will be received by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until June 5 for the construction, complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring and lighting fixtures of the U. S. post-office at Dublin, Ga. (See advertisement).

LA GRANGE, GA.—Bids were received as follows on April 20 by James Knox Taylor, Superv. Architect, Treasury Dept., Washington, D. C., for the construction of a U. S. post-office building at La Grange, Ga.: Miles & Bradt, Atlanta, Ga., $55,000; King Lumber Co., Charlottesville, Va., $55,650; Pearson Construction Co., Dothan, Ala., $46,600; George Becking, Chattanooga, Tenn., $51,920; Johnson & Matthews Construction Co., Florence, S. C., $62,500; Holladay & Crouse, Greensboro, N. C., $58,618; Algernon Blair, Montgomery, Ala., $60,000; Newport Contracting & Engineering Co., Newport News, Va., $59,269.

SAVANNAH, GA.—Plans are being prepared by W. L. Stoddart, 30 West 38th St., New York, N. Y., for the erection of a hotel for the Greater Savannah League. The estimated cost is $350,000.

JACKSONVILLE, FLA.—The Legislature has, it is reported, appropriated $60,000 for a combination auditorium library building for the Alabama Normal College.

QUINCY, FLA.—The construction of a court house, costing $60,000, is contemplated by the County Commissioners of Gadsen County.

✚JACKSONVILLE, FLA.—The contract has been awarded to COHEN BROS., Jacksonville, Fla., for the erection of a department store for a Philadelphia concern. The estimated cost is $300,000.

FLORENCE, ALA.—The State Legislature has appropriated $50,000 for the construction of a dormitory at State Normal College.

ROUSTON, LA.—E. F. Neild, Shreveport, La., has prepared plans for the construction of a high school. The estimated cost is $60,000.

DYERSBURG, TENN.—Bids will be received by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until May 29, for the construction, complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring), of the U. S. post-office at Dyersburg, Tenn. Drawings and specifications may be obtained from the Custodian of site at Dyersburg, Tenn., or at the discretion of the Superv. Arch.

✚COVINGTON, KY.—It is reported that the contract has been awarded by the Louisville & Nashville Ry. to THRASHER & GUNTER, Chattanooga and Knoxville, for remodeling the yards at Decoursey, Ky.; they will also be enlarged. The estimated cost is $350,000.

✚MT. STERLING, KY.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded contract for the construction of a U. S. postoffice building at Mt. Sterling, Ky., to HARRY A. BISHOP, Chicago, at $50,000.

ASHLAND, OHIO.—Bide were opened April 15 for the construction of the Samaritan Hospital as follows: James F. Barnes,

Logansport, Ind., $46,823; A. F. Wendling, Massillon, O., $55,849; John Heckart, Columbus, O., $49,668; Cutchbart Bros. Co., Pittsburg, Pa., $57,564; George W. Carmicheal & Co., Akron, O., $52,042 (contract awarded); Simon Small & Son, Mansfield, O., $58,198; National Concrete Fireproofing Co., Cleveland, O., $65,300; George B. Long, Akron, O., $55,000; George A. Aberthney, Columbus, O., $48,872; R. H. Evans & Co., Zanesville, O., $52,189; Benjamin F. Bolin, Columbus, O., $52,474; James Devault, Canton, O., $62,323; Rough Construction Co., Cleveland, $54,600.

BOWLING GREEN, OHIO.—The citizens of Bowling Green have subscribed the sum of $40,000 for the purchase of a site upon which it is proposed to erect a State Normal School.

COLUMBUS, OHIO.—Plans are being prepared by Architect C. W. Bellows for a business block to be erected at the southwest corner of Fifth Ave. and High St.

CLEVELAND, OHIO.—A church, costing about $100,000, will probably be erected by the Highland Congregational Church congregation. William J. Paske is rector.

BLOOMINGTON, IND.—John W. Cravens, Secy. Board of Trustees, Indiana University, will receive bids until May 1 for the construction of an addition to Owen Hall, of Indiana University.

BERNE, IND.—Bids will be received until May 4 for the erection of a school building. Abraham Boegly is Arch.

HAMMOND, IND.—Bids will be received by the Board of Public Works until April 28, for reconstructing the city hall.

ANN ARBOR, MICH.—Plans are being prepared by Williams Bros., 604 Whitney Bldg., Detroit, Mich., for reconstructing the Cook House which was recently damaged by fire. The probable cost of repairs is about $40,000.

DETROIT, MICH.—Gregory, Mayer & Thorn, Woodward and Congress Sts., have purchased a lot on the north side of Cadillac Sq., and will erect a 6-story building on it. The cost is about $80,000. Architects have not been selected.

Harry J. Rill, 54 Buhl Bldg., is preparing plans for a church, 74 x 100 x 243 ft., and a parochial residence, 3 stories and basement, 67 x 46 ft., for St. Stanislaus Roman Catholic Church. The Rev. F. Gzella, 1272 Dubois St., is Rector. The cost is $100,000, and residence $40,000. Architect will receive bids some time in May.

E. W. Gregory, 1646 Woodward Ave., will soon be ready for figures on the apartment house to be located at the corner of Park Pl. and High St. for John M. Dillon and L. W. Kendall, 214 Garfield Ave. The cost is $150,000.

Burrowes & Wells, 701 Trussed Concrete Bldg., are preparing plans for a 2-story and basement flower shop, 44 x 100 ft., to be located on Broadway Ave. Architects will soon take figures.

C. Howard Crane, 712 Ford Bldg., has awarded the structural iron contract for the Studio Building, 128 x 60 ft., 40 ft. high, to H. B. LEWIS, 45 Joseph Campau Ave.; masonry let to JAMES E. MOODY, 712 Ford Bldg., care architect. Charles L. Baker, 93 Washington Ave., is owner. Cost, $50,000.

Varne & Winter, 58 Equity Bldg., have awarded the structural iron contract for the new factory, 26 x 170 ft., to WHITEHEAD & KATES, Beecher Ave., and M. C. R. R. George T. Sampson, 79 Palmer Ave., is owner.

FLINT, MICH.—Malcomson & Higginbotham, 404 Moffat Bldg., Detroit, Mich., will soon take figures on a nurses' home, to be two stories high and basement, 79 x 46 ft., for the Hurley Hospital, Flint, Mich. Cost, $40,000.

LANSING, MICH.—Morrison H. Vail, Dixon, Ill., has prepared plans for a 2-story and basement church, 60 x 90 ft., for the Michigan Ave. Methodist Episcopal congregation, Lansing, Mich. Address Dr. A. W. Dawrason, Arbaugh Bldg.

✚HANCOCK, MICH.—The contract has, according to press reports, been awarded to ANDREW GAUTHIER for the construction of the proposed opera house. P. M. Olson, Duluth, Minn., is Arch. The estimated cost is $40,000.

CHICAGO, ILL.—J. B. Maller, old No. 258 Madison, will erect a 20-story building on Wabash and Madison Sts. C. A. Eckstorm, Arch., is now taking figures on caisson work.

✚DECATUR, ILL.—The contract has been awarded to BAKER BROS., Decatur, for the construction of the Morehouse-Wells building on East Main St. The estimated cost is $85,000.

MADISON, WIS.—Kletszch Bros., Milwaukee, Wis., have commissioned Ferry & Clas, Archts., 416 Broadway, Milwaukee, to prepare plans and specifications for remodeling the Park Hotel, Madison, Wis. Cost, $75,000.

The Capitol Commission of Wisconsin, Lew F. Porter, Madison, Secy., will receive bids until May 9 for furnishing the material and labor for the construction of the superstructure of the dome for the new $6,000,000 Wisconsin State Capitol. George B. Post & Sons, 347 Fifth Ave., New York, are Archs.

MILWAUKEE, WIS.—Charles F. Pfister, proprietor of Hotel Pfister, is considering the proposition of erecting an addition to the hotel, practically duplicating it in size, to include a large concert and grand opera house, similar in plan to the Auditorium and Annex in Chicago. Mrs. Clara Bowen Shepard, impresaria, Milwaukee, will give further information as plans proceed.

Rev. G. Heathcote Hills, Rector, St. Mark's Episcopal Church, Belleview Pl. and Hackett Ave., has procured subscriptions of $15,000 toward a fund of $50,000 for the erection of a new edifice. The fund is expected to be completed by July 1, and construction work will probably be commenced this year.

✚SHEBOYGAN, WIS.—The Majestic Theatre Co. has awarded the contract for steel construction and materials for the new Majestic theatre building to WISCONSIN BRIDGE & IRON CO., Milwaukee. About 100 tons of structural shapes will be required.

✚WATERTOWN, WIS.—The general contract for the construction of the new Federal building has been awarded to GEORGE W. STILES CONSTRUCTION CO., Chicago, Ill., at $58,721. James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C.

✚WATERTOWN, WIS.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded contract for the construction of a U. S. post-office at Watertown, Wis., to GEORGE W. STILES CONSTRUCTION CO., Rookery Bldg., Chicago, Ill., at $58,721. This contract was originally awarded to the Northern Construction Co., but the contract was annulled.

ALGOMA, WIS.—Bids will be received until April 29 by William Hobus, Clk. of School Bd., for the erection of a school. W. E. Reynolds, 109 South Eleventh St., Green Bay, Wis., is Arch.

LOGANVILLE, WIS.—William Kohlmeyer of St. Peter's Lutheran Church, will receive bids until noon, April 27, for the construction of a school.

DES MOINES, IOWA.—A bill has been passed appropriating $65,000 for the erection of building for the exhibit of farm implements at the Iowa Fair and Exposition grounds.

STOCKPORT, IOWA.—M. N. Russell, Secy. School Bd., will receive bids until May 11 for the erection of a school house. H. E. Thorne, Ottumwa, Iowa, is Arch.

DULUTH, MINN.—The financing of the proposed new Kitchi Gammi Club building is about arranged and it is expected that the plans will be prepared soon. The new building will cost about $250,000 and will be erected at Ninth Ave. East and Superior St.

✚MINNEAPOLIS, MINN.—According to press reports the contract has been awarded to PIKE & COOK, 416 Fifth Ave., South Minneapolis, Minn., for the construction of the building for the McKnight Co. The estimated cost is $250,000.

BELGRADE, MINN.—The Board of Education will receive bids until May for the construction of a school. F. W. Kinney, 605-607 Kasota Bldg., Minneapolis, Minn., is Arch.

MONTEVIDEO, MINN.—The Board of Education will receive bids until April 2 for the construction of a school. F. W. Kinney, 605-607 Kasota Bldg., Minneapolis, Minn., is Arch.

OMAHA, NEB.—Bids will be received by Fisher & Laurie, Paxton Block, until May 1, for the erection of a 4-story and basement addition to the Nebraska National Bank.

AMHERST, N. DAK.—W. Fred Donkin, Town Clk., will receive bids until May 1 for the construction of a brick school, with cement trimmings, on Heckman St. L. R. Fairn, Aylesford, N. Dak., is Arch.

✚DICKINSON, N. DAK.—The contract has been awarded to POWERS & SON, Fargo, N. Dak., for the construction of a brick hospital at Dickinson. The estimated cost is $72,000.

McCLUSKY, N. DAK.—According to press reports, bids are now being received for the construction of a school. The probable cost is $80,000.

ST. LOUIS, MO.—The Laclede Gas Co. will erect an office building at Eleventh and Olive sts. The estimated cost is $200,000.

A theater will, it is reported, be erected by the Empress Amusement Co. at Oliver St. The estimated cost is $100,000. John R. Dwyer prepared the plans.

PINE BLUFF, ARK.—The Pine Bluff Hotel Co. will erect a hotel at Fifth Ave. and Main St. The estimated cost is $350,000. George R. Mann, Little Rock, Arch.

ASPERMONT, TEX.—The taxpayers of Stonewall County have voted favorably on the proposition to issue $50,000 of bonds for the purpose of erecting a new court house at Aspermont.

BROWNSVILLE, TEX.—The proposition of submitting to a vote of the taxpayers the question of issuing $80,000 of bonds for the erection of a new high school building is being agitated here.

HARLINGEN, TEX.—The St. Louis, Brownsville & Mexico R. R. is having plans prepared for a hospital that it will erect here.

HOUSTON, TEX.—The City Council has called an election of taxpayers for May 23 to vote on the proposition of issuing $500,000 of bonds for the purpose of constructing public school buildings and purchasing the necessary sites.

TERRELL, TEX.—Bids were received as follows on April 25 by the Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office at Terrell, Tex.: J. F. McKnight, Hallettsville, Tex., $48,200; John Bardon, Fort Worth, Tex., $46,500; Texas Building Co., Fort Worth, Tex., limestone, $54,700; sandstone, $58,000; King Lumber Co., Charlottesville, Va., limestone, $47,00; sandstone, $50,000; L. R. Wright, Dallas, Tex., $53,44; Feil & Ainsworth, Waco, Tex., either, $42,000; M. B. Whitlock & Co., Denton, Tex., $45,237; Dieter-Wenzel Construction Co., Wichita, Kans., $47,365. Bids are on limestone unless otherwise stated. Noted March 30.

OAKLAND, CAL.—The Board of Public Works will receive bids until May 11 for the construction of a city hall. Plans were prepared by Palmer & Hornbostel, First National Bank Bldg., Oakland, Arch.

SACRAMENTO, CAL.—Bids will be received until May 10 by the Board of Education for the construction of a detention home on the site of the County Hospital. R. A. Herold, Bryte Bldg., Sacramento, Cal., is Arch.

## WATER SUPPLY—IRRIGATION.

*(✚Denotes a contract awarded.)*

BRUNSWICK, ME.—The Town Council is considering the purchase of the property of the Freeport Water Co.

✚SOUTH HADLEY, MASS.—John E. PALMER, Boston, has been awarded the contract for laying 27,700 ft. of water pipe for Fire District No. 2, and setting 35 hydrants. DANIEL CORNELL SONS have received the contract for erecting a pumping station.

MERIDEN, CONN.—The State Legislature has passed the bill authorizing the city to issue $500,000 of water bonds.

CENTRAL VALLEY, N. Y.—The Commonwealth Water Co., New York, it is reported, is considering the installation of a chemical filter here.

FULTON, N. Y.—Bids were opened on April 17 by the Board of Public Works for 300 tons of 18-in. and 70 tons of 14-in. pipe, and 1,200 lbs. of 14-in. and 5,000 lbs. of 18-in. Standard castings. We are officially advised that the following bids were submitted: Charles Millar & Son Co., Utica, N. Y., $21.40 per ton for pipe, and $50 per ton for special castings; U. S. Cast Iron Pipe & Foundry Co., $21.40 and $50.

FREDONIA, N. Y.—The Village Board has authorized the preparation of plans and estimates of the cost for improvements to the village water-works system.

NEW YORK, N. Y.—Bids will be received by Henry S. Thompson, Comr. Water Supply, Gas and Electricity, until 2 p. m., May 3 for furnishing and delivering double-nozzle fire hydrants.

PORTLAND, N. Y.—E. A. Wilder, of Fredonia, N. Y., has been directed to prepare preliminary plans and estimates for a diversion channel around the present impounding reservoir with necessary dams and connections. Estimated cost, $15,000 to $20,000.

ALBANY, N. Y.—Bids have been received by the Trustees of Public Buildings for stand pipes and hose reels for the protection of the Capitol Building against fire, as follows: The R. T. Ford Co., Rochester, N. Y., $15,900; William B. Armstrong, Albany, $15,957; James Hunter, Albany, $16,439; H. G. Vogel Co., New York, (alternate bids) $17,500, $18,330 and $21,245; William Messer Co., New York, $30,000, and James F. Martin, Albany, and Edward F. Joy, Syracuse, N. Y., $32,500. Joseph P. McGuire, Albany, offered to do the work on basis of 7% profit over cost of labor and material. F. B. Ware is State Arch. Noted on April 20.

*GENEVA, N. Y.—Bids will be received until 7.30 p. m., May 11, by the Board of Public Works for laying about 13,000 ft. of 20-in. c.-i. water main, including valves and specials. C. T. Church is Supt.

✚TROY, N. Y.—Contracts were awarded by the Board of Control, on April 25, as follows: To the McDONOUGH CONSTRUCTION CO., of Troy, for the construction of the Martin-Dunham reservoir and spillway, at $155,276; to the LUDLOW VALVE MFG. CO., for valves; to R. D. WOOD & CO., Philadelphia, Pa., for c.-i. pipe.

TRENTON, N. J.—The State Senate has passed the bill authorizing the city to construct a filtration plant. A. Swan, Jr., is City Engr.

STANHOPE, N. J.—The city decided, on April 20, to construct a municipal water plant.

*PERTH AMBOY, N. J.—Bids will be received at the office of the Board of Water Commissioners until 8.30 o'clock p. m., May 3, for furnishing and laying 24-in. submerged water main with connections in accordance with plans and specifications on file in the office of the Clerk of the Board, copies of which may be obtained from Samuel J. Mason, Engr., 102 Smith St., Perth Amboy.

LANCASTER, PA.—Bids will be received by the Water Commission until May 9 for the construction of a concrete dam across the Conestoga River at the pumping station in Manheim Township. F. H. Shaw is Supt.

SPRINGDALE, PA.—Bids will be received until 8 p. m., May 1, by H. J. Barnes, Council Clk., for constructing 35,660 lin. ft. c.-i. water lines and a 350,000-gallon reservoir, etc.; also 33,600 ft. of sewers. Douglass & McKnight are Engrs., 1709 Union Bldg., Pittsburg, Pa.

PITTSBURG, PA.—We are officially advised that bids were received as follows by the city on April 17 for the Mission St. pumping station building and appurtenances: William Kerr's Sons, Lewis Bldg., Pittsburg, $93,200; Golden & Crick, $94,194; W. T. Powell, $94,358. Joseph G. Armstrong is Dir. Pub. Wks.

WASHINGTON, D. C.—Bids were received as follows on April 21 by the Commissioners of the District of Columbia, for furnishing pipe, etc.: Cast-iron water pipe: Item (1) 811 tons, 16-in.; (2) 1,125 tons, 20-in., 9-in. thick; (4) 475 tons 20-in., 6-in. thick; (3) 90 tons (a) specials on standard specifications; (b) on bidder's specifications: U. S. Cast Iron Pipe & Foundry Co., New York, Items (1-3) 22.84; (4) $54.84. Standard Cast Iron Pipe & Foundry Co., Bristol, Pa., Items (1-2) $24.08; (3) $24.58; (4a) $51.50. Lynchburg Foundry Co., Lynchburg, Va., Items (1-3) $24.02; (4b) $52.60. Camden Iron Works, Camden, N. J., Items (1-3) $24.02, (4b) $52.60. Cocks: Item (1) 4,000 ¾-in. corporation cocks; (2) 200 1½-in. corporation cocks; (3) 250 ¾-in. lead corporation cocks; (4) 4,250 ¾-in. iron curb cocks; (5) 150 ¾-in. lead and iron curb cocks: H. Mueller Mfg. Co., New York, (1) 60.75 cts.; (2) $2.40; (3) 71.5 cts.; (4) 72 cts.; (5) 77 cts.—82.5 cts. on solid curb cocks. A. P. Smith, East Orange, N. J., (1) 59 cts.; (2) $1.96; (3) 62 cts.; (4) 72 cts.; (5) 77 cts. Walworth Mfg. Co., Boston, Mass., (1) 67 cts.; (4) 85.5 cts. Glauner Brass & Mfg. Co., Cleveland, Ohio, (1) 56.5 cts.; (2) $2.18; (3) 86 cts.; (4) 81 cts.; (5) 82 cts. Hayes Mfg. Co., Erie, Pa., (1) 58.5 cts.; (2) $2.22; (3) 58 cts.; (4) 63 cts.; (5) 63 cts.

CLINTON, S. C.—The city has voted $20,000 of bonds for the extension of the water mains. The J. B. McCrary Co., Atlanta, Ga., is Engr.

✚COLUMBIA, S. C.—The city has awarded the contract to WESTON & BROOKER for laying two 8-in. water mains. The contract for materials has been awarded to the LYNCHBURG FOUNDRY CO., Lynchburg, Va. F. C. Wyse is Engr. Reported noted.

✚ATLANTA, GA.—The city has awarded the contract to the COLUMBIAN IRON WORKS, of Chattanooga, Tenn., for furnishing fire hydrants, at about $8,000. The contract for a filter house at the filtration plant has been let to GEORGE A. CLAYTON.

JACKSON, GA.—The city will make improvements to the water-works. New mains will be laid in several streets.

SWAINSBORO, GA.—The citizens on April 17 voted to issue $40,000 of bonds for the installation of water-works and electric lights.

SOUTH JACKSONVILLE, FLA.—The citizens have voted $60,000 of bonds for the construction of water-works and an electric light plant.

MORGAN CITY, LA.—The city has decided to construct water-works to cost about $60,000 and contemplates issuing $1[illegible],000 of bonds.

CINCINNATI, OHIO.—The City Council will issue $160,000 of bonds for the improvement of the water-works. F. H. S[illegible]ley is City Engr.

✚*MANSFIELD, OHIO.—Bids will be received until noon, May 2, at the office of A. Kallmerten, Secy. Dir., Pub. Ser., for improving the city water-works by installing additional pumping equipment, consisting of power-house equipment, motor-driven pumps and transmission lines. John Cahall is Dir. Pub. Ser.

KENTON, OHIO.—We are officially advised that bids will be asked about June 1 by the city for constructing partly new and remodeling the old water-works. Charles Brossmann is Engr., Indianapolis, Ind. V. H. May is Supt. W.-Wks.

SPRINGFIELD, OHIO.—The city will ask for bids for material for the proposed water-works force main and for the supply of pipe for this season. George Cotter is Supt. W.-Wks.

WHITING, IND.—Bids will be received by the City Clerk until May 1 for the construction of water mains in 121st St., Indiana Boulevard and Clark St.

CHICAGO, ILL.—Bids will be received at the office of the U. S. Reclamation Service, Federal Bldg., Chicago, until 2 p. m., May 5, for furnishing explosives and blasting supplies for a period of two years from May 15, 1911. The amount of explosives and supplies required under this contract cannot be definitely stated. It is expected, however, that the requirements will not vary greatly from those of last year, which were approximately 135,000 lbs. of straight nitro-glycerine dynamite, 35,000 lbs. low freezing dynamite, 345,000 lbs. gelatine dynamite, 22,000 lbs. granulated powder, 11,000 kegs black blasting powder, 250,000 detonators, 25,000 electric detonators and 700,000 ft. of safety fuse. To be delivered f. o. b. cars at places named by the bidder.

✚CHICAGO, ILL.—The contract has been awarded by B. J. Mullaney, Comr. Pub. Wks., to the JAMES A. BRADY FOUNDRY CO., 35th St. and Ashland Ave., Chicago, for furnishing and delivering to the various pipe yards 200 tons of special castings from 4 ins. to 12 ins. in diameter and others not to exceed 48 ins., at $9,560.

✚EAST MOLINE, ILL.—The contract has been awarded to E. R. HARDING, of Racine, Wis., by the Board of Local Improvements for the construction of 7½ miles of water mains at about $75,000.

ROCK ISLAND, ILL.—Plans are being prepared by Capt. H. B. Jordan, Corps Engrs., U. S. A., for the proposed filtration plant at the Rock Island Arsenal. Congress has appropriated $30,000 for this work.

STERLING, ILL.—The Sterling Water Co. and the City Council have reached an agreement whereby extensions of the system throughout the city will be made. Estimated cost, $75,000. J. D. Arey is City Engr.

SUPERIOR, WIS.—The city is considering the construction of a water plant. E. B. Banks is City Engr.

MONTICELLO, WIS.—We are officially advised that W. G. Kirchoffer, Consult. Engr., Madison, Wis., has been employed to prepare plans for a water-works system, consisting of 8,000 ft. of 6-in. and 8-in. c.-i. pipe; a concrete reservoir or elevated tank; one deep well and a power pump. Plant will be operated by engine and boilers now located in the electric-light plant.

✚RACINE, WIS.—The Racine Water Co. has awarded the contract for furnishing and installing an 8,000,000-gallon pumping engine and accessories to FRED M. PRESCOTT STEAM PUMP CO., Milwaukee, Wis., at about $56,000.

✚RICHLAND CENTER, WIS.—We are officially advised that the contract has been awarded by the city to the HEINE CHIMNEY CO., Chicago, Ill., for the erection of a chimney.

✚SHEBOYGAN, WIS.—The Board of Public Works has awarded the contract for furnishing 4, 6, 8, 10 and 12-in. c.-i. water mains to the U. S. CAST IRON PIPE & FOUNDRY CO., of Louisville, Ky. The contract calls for approximately 400 tons.

SULLY, IOWA.—The citizens have voted $8,500 of bonds for the installation of a water supply system.

*TIPTON, IOWA.—Bids will be received by the City Council until 7.30 p. m., May 15, for drilling an artesian well, furnishing all labor and material necessary to complete the same according to specifications now on file with C. H. Foy, City Clk. Instructions and specifications can be obtained upon application.

MANKATO, MINN.—Bids will be received by A. H. Sch[illegible], City Clk., until 10 a. m., May 1, for removing old boiler and furnishing and insta[illegible] a new boiler at the pumping station, [illegible] HP., 150-lb. pressure. Bids will be recei[illegible] on both internally fired and horizontal tubular.

SHAKOPEE, MINN.—The citizens on April 4 voted to is[illegible] $10,000 of bonds for water-works improvements. Alexander Schaefer is City Recdr.

✚ALEXAN[illegible]IA, MINN.—We are officially advised that [illegible] contract has been awarded to W. B. [illegible]ORTH, of Ada, Minn., by the city for the [illegible]nstruction and installation of water mai[illegible] Sixth Ave. Bids were opened on April 2[illegible].

MINNEA[illegible]IS, MINN.—Henry N. Knott, City Clk., [illegible] receive bids until 7.30 p. m., May 12, fo[illegible] 5/8-in., 400 3/4-in., 100 1-in., 75 1½-in. [illegible] 50 2-in. meters.

✚JUNCT[illegible] CITY, KAN.—The contract has been [illegible] to C. C. STEVENSON by the Union Lig[illegible] & Power Co., of Junction City, for the [illegible]uction of a cement pump pit with conn[illegible] tunnels to the various wells.

✚ST. P[illegible], NEB.—We are officially advised that [illegible] contract has been awarded to J. P. JOH[illegible]ON & SON, of St. Paul, for the labor requ[illegible] in the construction of extensions to t[illegible] water-works. Materials for the work have [illegible]ready been purchased. Bids were opened on April 17.

YANKTON, S. DAK.—Bids will be received by John W. Summers, City Audr., until 8 p. m., May 1, for the construction of a water main along Fourth St., between Green and Park Sts., "Witherspoon's Yankton," all work to be done according to plans and specifications on file in the office of the City Auditor.

GRAFTON, N. DAK.—Bids will be received until 6 p. m., May 1, by J. H. Johnson, City Audr., for sinking a 6-in. artesian well.

KENMARE, N. DAK.—A. G. Engdahl, City Audr., will receive bids until 8 p. m., May 1, for the construction of water mains in First St.

*HELENA, MONT.—We are officially advised that bids for the construction of the municipal water-works plant were received as follows on April 20 by the city: C. L. Morris Construction Co., Seattle, Wash., $618,840; Adami Bros. & Co., Helena, $648,-419; P. E. McHugh, Tacoma, Wash., $646,-000. Engineer's estimate, $606,000. The Helena Water-Works Co., on April 17, made an offer of its plant, complete, for $400,000, which is $190,000 less than the offer of March 6. The Council rejected all bids in order to consider the offer. Charles W. Helmick is City Engr.

CHILLICOTHE, MO.—Bids will be received by Ira G. Graham, City Audr., until 9 a. m., May 8, for constructing a municipal electric light and power plant, including deep well, for water supply, tower and tank for water storage, etc. Plans may be seen at the office of the City Clerk or at the office of the Fuller-Coult Co., Engrs., Chemical Bldg., St. Louis, Mo.

COLE CAMP, MO.—The citizens have voted to issue $10,000 of bonds for the installation of water-works.

DEL RIO, TEX.—The preliminary surveys for a large system of irrigation and a large hydroelectric plant to be established on the Pecos and Devil's Rivers in the Del Rio section, it is reported, are now being made. It is announced that more than $5,000,000 will be invested in the enterprise. David R. Francis, St. Louis, Mo., is interested.

SAN ANTONIO, TEX.—The Gulf Coast Drilling Co. has been organized here, with a capital stock of $10,000, for the purpose of constructing, maintaining and operating dams, reservoirs, canals and irrigation pumping plants. The incorporators are I. N. Bettison, M. J. Bass and H. G. Egli.

TERRELL, TEX.—The city has issued $12,-000 of bonds for boring artesian wells for the water-works system, and $10,000 of bonds for constructing new sidewalks.

BROWNSVILLE, TEX.—The $204,500 of Cameron County drainage bonds, recently issued, have been approved by the Attorney General. As soon as the bonds are disposed of the work of constructing a drainage system that will reclaim about 81,000 acres of land in the valley of the Rio Grande will be started.

EASTLAND, TEX.—The town has issued $15,000 of bonds for the installation of a system of water-works, including a pumping plant.

GALVESTON, TEX.—The Board of Commissioners have opened bids for the construction of a duplicate water main across Galveston Bay via the new causeway now being constructed. The lowest bid was that of Isaac Heffron, of Galveston, at $66,389. An issue of $100,000 of bonds for this purpose has been voted on and authorized. The duplicate main is to be 30 ins. in diameter and approximately 10,766 ft. long.

KILLEEN, TEX.—The Atchison, Topeka & Santa Fe Ry. Co., John Roach, Division Engr., Amarillo, Tex., is having surveys made for the construction of a large reservoir near here, to cover 75 acres of ground.

LOT[illegible], TEX.—The city has voted $14,000 of bonds for water-works improvements.

SOP[illegible]R, OKLA.—The citizens have voted bonds for the installation of a water-works system.

GUTHRIE, OKLA.—Bids will be received until April 28 by the State Board of Agriculture, Guthrie, for boring artesian wells in B[illegible]er, Texas and Cimarron counties. The s[illegible] of $45,000 is available for the work.

KINGFISHER, OKLA.—See item under Light, Heat and Power.

SAPULPA, OKLA.—Bids will be received until [illegible] p. m. April 28, by the city for the construction of water works. Estimated cost, $200,000. Ira J. Anderson is City Clk. Burns & McDonnell are Consult. Engrs., Scarritt Bldg., Kansas City, Mo.

DENVER, COLO.—The Interstate Irrigation Co., it is reported, will reclaim 136,000 acres of state land in La Plata, County. Estimated cost, $1,000,000.

SANTA FE, N. MEX.—The Hammond, Farmington Canal Co., of Santa Fe., recently organized, with a capital stock of $250,000, will construct, it is reported, an extensive sy$stem of irrigation in the valley of the San Juan River, in San Juan County.

✚HAILEY, IDAHO.—The Secretary of the Interior has awarded the contract to the ALLIS-CHALMERS CO., of Los Angeles, Cal., for furnishing two 125 second-feet pumps, one 75 second-feet pump, and two 600-KW. transformers for use in connection with the Minidoka irrigation project, Idaho, at $16,070.

PRESTON, IDAHO.—The citizens have voted to issue bonds for the installation of a municipal water-works system.

PARK CITY, UTAH.—Bids will be received by the City Recorder until May 1 for constructing reservoirs and all water mains that may be ordered by the City Council.

TUCSON, ARIZ.—The following bids were received by the Board of Water Commissioners, on April 12, for the construction of a reinforced concrete standpipe. Bids were received for a plain and ornamental finish: George Cook & Co., $16,150 and $16,561, respectively; V. S. Griffith, $16,450; Piedmont Construction Co., $17,150 and $19,590; Petterson & Schmidt, $18,250 and $18,955; Welch & Co., $20,000; Barman Construction Co., $23,116.

CHELAN, WASH.—We are officially advised that bids are being asked for by the Lake Chelan Land Co., of Chelan, for building 2½ miles of flume, containing 500,000 ft. of lumber. This is the first section of 15 miles of similar construction; also five miles of lateral ditch, involving the removal of 25,000 yds. of earth and rock. H. W. Boetzkes is Engr.-in-Charge.

MEDFORD, ORE.—The city is considering laying water mains as follows: 4-in. main on Eleventh St., from Beach to Plum Sts.; 4-in. main in Alico St., from Beatty St. to Niantic St.; 6-in. main in South Peach St., from Dakota St. to South City limits; 6-in. main in Williamette Ave., from East Main St. to south end of street; 4-in. main in Taylor St., from Cottage St. to east end of street; 6-in. main in East Eleventh St., from Portland Ave. to Williamette Ave.; and 4-in. main in Myrtle St., from Main St. to Taylor St. H. E. Foster is City Engr.

CORNING, CAL.—Bids will be received until May 2 by the city for the construction of water-works and a sewer system, from plans prepared by W. F. Lunning, of Red Bluff, Cal. Estimated cost, about $46,800. E. L. Randall is City Clk.

FORT BAKER (Sausalito post-office), CAL. —Bids were received as follows on April 4 by Maj. George McK. Williamson, Q. M., U. S. A., Fort Mason, Cal., for reconstructing pump house, installing machinery, erecting a steel tank and laying 6-in. water main at Fort Baker: (a) for entire work; (b) reconstructing pump house; (c) installing machinery; (d) steel tank; (e) 6-in. water main; Braun, Williams & Russell, 503 Market St., (d) $2,795; F. C. Roberts & Co., 461 Market St., (a) $14,725; American Construction Co., 359 Monadnock Bldg., (b) $3,-160, (d) $3,564, (e) $4,485; Compressed Air Machinery Co., Stevenson & Ecker, (a) $18,-838, (b) $2,723, (c) $6,765, (d) $4,987, (e) $4,143; Duncanson Harrison, 1407 Chronicle Bldg., (a) $22,890, (b) $6,985, (c) $6,895, (d) $4,445, (e) $5,900; H. W. Moffit & Co., Oakland, Cal., (a) $15,994; Butte Engine & Electric Co., 683 Howard St., (a) $17,178, (b) $2,288, (c) $5,500, (d) $4,102, (e) $5,-288; Pringle, Dunn & Co., 338 Pine St., (a) $15,477, (b) $1,947, (c) $5,225, (d) $4,262, (e) $4,480; Nelson Bauer, Metropolis Bank Bldg., (a) $18,075, (b) $3,250, (c) $5,032, (d) $4,095, (e) $4,985; Michael Murphy, Berkeley, Cal., (e) $4,750; Chambers & Heafey, Oakland, Cal., (a) $16,141, (b) $2,-905, (c) $4,980, (d) $3,600, (e) $4,956; George E. Dow, 415 Sheldon St., (c) $4,850; Sampson Iron Works, Stockton, Cal., (c) $4,575. All bidders of San Francisco unless otherwise stated.

✚ONTARIO, CAL.—Contracts for the construction of three reservoirs for the city's new water system have been awarded by the City Council to SIMMONS & HAYDEN, for the cement work, and to OSCAR COIN for the roofing of the reservoirs. Both contractors of Ontario. Total cost, $20,075.

STOCKTON, CAL.—We are officially advised that bids will be asked early in May for about $1,000,000 worth of work on the irrigation system of the South San Joaquin Irrigation District, near Stockton. Edwin Duryea, Jr., 1315 Humboldt Bank Bldg., San Francisco, Cal., is Ch. Engr., South San Joaquin Irrigation District. Noted on Dec. 1, 1910.

FORT MASON, (San Francisco postoffice) CAL.—Bids will be received until 11 a. m. May 17, by Lt. Col. George McK. Williamson, Const. Q. M., U. S. A., Fort Mason, for constructing a 6,000,000-gallon reinforced concrete reservoir, etc., at the Presido of San Francisco.

OAKDALE, CAL.—Bids will be received until 11 a. m. May 12, by the Board of Directors of Oakdale Irrigation District, Oakdale, for the construction of all of the canals of the Oakdale Irrigation District, except the dam and portion of the canal constructed jointly by South San Joaquin Irrigation District and Oakdale Irrigation District and in accordance with the plans and specifications of the work and instructions to bidders which may be seen at the office of the Board. The work is described as follows: South Main Canal: This consists of about 9 miles of canal and tunnels estimated at 198,000 cu. yds. of open excavation, 33,400 cu. yds. of tunnel excavation, 22,900 lin. ft. of concrete lining of canal and tunnels with the necessary flumes, flood wiers, highway and farm crossings, head-gates and sand sluices. The South Distributing Main: This consists of about 12 miles of canal, estimated at 254,000 cu. yds. of open excavation with the necessary flumes, diverting and floor wiers, railroad, highway and farm crossings, head-gates and drops. The South Main Laterals: About 38 miles of scraping work on the plains, with necessary structures for diversions, drops and crossings. Sizes of canals various, the total estimated at 450,000 cu. yds. The North Distributing Main: This consists of about 20 miles of canal and tunnels, estimated at 377,000 cu. yds. of open excavation, 13,540 cu. yds. of tunnel excavation, with the necessary diverting and storm wiers, highways and farm crossings, flumes, turn-outs and head-gates. The North Main Laterals: About 20 miles of scraping work on the plains, with the necessary structures for diversions, drops and crossings. Sizes of canals various, the total estimated at 250,000 cu. yds. Estimated cost, $1,930,500. Bids will be received for work as a whole. George L. Dillman is Ch. Engr., Union Trust Bldg., San Francisco, Cal.

## SEWERS.

*(*Denotes that this work is advertised in Engineering News.)*

BOSTON, MASS.—Bids will be received until April 28 for five 20-in. and four 30-in. cast-iron gate valves, for sewerage purposes. J. Edward Mullen is Supt. of Supplies.

DEDHAM, MASS.—Bids will be received until 7.30 p. m., April 28, for laying 5,800 ft. of 8-in. pipe sewer. Henry R. Alexander is Chn. Sewer Com.

✚*EAST AURORA, N. Y.—Bids were received by the Board of Trustees of the Village of East Aurora on April 18, for the furnishing material and performance of labor for the construction of a sewer system, including a sewage disposal plant, as follows, (A) sewer, (B) disposal plant, (C) sewer and disposal plant: Moore & Smith, Buffalo, N. Y., (B) $29,265, Baker Owen Construction Co., Johnstown, Pa., (A) $104,-851; Albert Galley, Syracuse, N. Y., (B) $20,922, (C) $120,458; Durolithic Co., Buffalo, N. Y., (B) $33,065; Williams & Knowlson, Grand Rapids, Mich., (B) $26,859, (C) $118,157; Hydro Construction Co., Buffalo, N. Y., (B) $29,577; Busch & Percival, Buffalo, N. Y., (B) $29,228, (C) $125,569; Alfred C Bame, Lancaster, N. Y., (B) $21,719; John E. Johnson & Co., Buffalo, N. Y., (A) $91,-865; Cusano & Dower, Niagara Falls, N. Y., (A) $88,730; John D. Kuhn, Greensburg, Pa., (A) $76,325; James Duff Construction Co., Cleveland, Ohio, (B) $24,370. (C) $115,888; Joseph F. Slabele Co., Buffalo, N. Y., (B) $21,730, (C) $101,848; Gray & Miller, Hornell, N. Y., (A) $79,657; Republic Engineering & Construction Co., Buffalo, N. Y., (B) $24,400, (C) $99,757. Contracts awarded to the REPUBLIC ENGINEERING & CONSTRUCTION CO., for sewer system at $75,-139, and to ALFRED C. BAME for disposal plant at $21,719.. D. N. Rumsey is Clk.

✚HEMPSTEAD, L. I., N. Y.—The contract has been awarded to CYRIL MARSHALL, Hempstead, by the Trustees of Hempstead Village for the construction of the proposed sewer system.

NEW YORK, N. Y.—Bids will be received by Alfred E. Steers, Pres. of the Boro. of Brooklyn, until May 3 for constructing sewers in various streets and avenues in Brooklyn.

SYRACUSE, N. Y.—The Common Council has ordered the construction of the following sewers: 36-in. in diameter in Thomas St., from Jay St. to Manlius St.; 34-in. in Manlius, from Thomas for 450 ft. west and then 32-in. to Bracebridge st.; 32-in. in Bracebridge, from Manlius to Bronx Sts.; 27-in, in Bronx St., from Bracebridge to Pleasantview Aves.; 27-in. in Pleasantview to Argyle Ave. and 24-in. across certain lots to Briggs St.; 15-in. in Boulevard St., from Briggs to Huntley Sts.; 12-in. in Huntley, from Boulevard to Wadsworth St.; 12-in. in Wadsworth St., to the summit; 12-in. in Huntley St., from Wadsworth to summit of grade to the west; 22-in. in Manlius, from Bracebridge to Lera Sts.; 22-in. from Lean to Mayer and 15-in. from Mayer to Hollister Sts.; 15-in. in Lena St. for 340 ft. north and 12-in. to the end of Lena; 15-in. in Mayer, from Manlius St. 370 ft. north and 12-in. to the end of Mayer St.; 15-in. in Hollister, from Manlius St. for 540 ft. north and 12-in. to the end of Hollister; 12-in. in Helen St., from Manlius north to summit of grade; 12-in. in Oak St., from Manlius St. to Mertens Ave.; 12-in. in Mertens, from Dewitt to Helen Sts.; 12-in. in Paul Ave., from Teall Ave. to George St.; 27-in. in Durston Ave., from the tunnel sewer connecting with the Butternut St. trunk sewer to Jay St.; 12-in. in Thomas St., from Kline Ave. for 250 ft. north, and 15-in. to lot 25, block 535.

BUFFALO, N. Y.—The City Council has ordered construction of sewers as follows: 15-in. tile in Peru Place, east of Bailey Ave.; 10-in. tile in Oakland Place, south of Bryant; 15-in. tile in Lenox Ave., between Fields Ave. and Mineral Spring Ave.

MOUNT VERNON, N. Y.—Bids for the construction of a sewer in East Lincoln Ave. were received by the Common Council as follows: Louis Petrillo, $13,518; Sabino Guarino, $12,760; Smith Brothers, $11,912; Tony Lougo, $12,489; James Piro, $11,087; Charles Mottola, $10,750; Frank Nordone, $12,970; Inter-Urban Development Co., $14,917; Charles Sillery & Sons, $11,950.

NEW HARTFORD, N. Y.—Taxpayers in the district where it is proposed to spend $44,000 for a new sewer and disposal plant had a public meeting and made a formal declaration in favor of the project.

✚CHAMBERSBURG, PA.—The City Council has awarded the following contracts: Complete sewer system in town about 16 miles in length, to JAMES FERRY & SON, Pittsburg, $160,154; CANTRELL CONSTRUCTION CO., Philadelphia, was awarded contract for trunk line from disposal plant to Wolf Ave. at $22,953; disposal plant, PITT CONSTRUCTION CO., Pittsburg, $38,470. The total for the two bids for the disposal plant and trunk line is $61,424 or more than $3,000 less than the amount secured for this purpose by the bond issue. When the matter was voted upon Council asked for $65,000 as the necessary allowance for erecting and installing this part of the sewer system.

CONNELLSVILLE, PA.—Surveys have been made by J. B. Hogg, Engr., for the construction of sewers on the west side to be paid for by the Pittsburg & Lake Erie Ry. A 24-in. sewer is to be laid parallel to the private sewer of John Duggan in Seventh St., from Meason Ave. to the river. This sewer will also be laid in Meason Ave., between Seventh and Eighth Sts. An 18-in. sewer is to be laid along Veech St., from Main St. to Opossum Run.

NORRISTOWN, PA.—Bids will be received by William H. Shoffner, Chn. Highway Com., until April 27 for sewer pipe castings, etc., for ensuing year.

SPRINGDALE, PA.—Bids will be received by the Borough Council until May 1 for the construction of a water and sewer system. Douglass & McKnight, 1109 Union Bank Bldg., Pittsburg, Pa., are the Engrs.

TITUSVILLE, PA.—Bids will be received by the city until May 1 for furnishing all materials and doing the work of building a 9-in. tile sewer in West Bloss St. commencing at and connecting with the present sewer in West Bloss St. at west line of South Franklin St. and thence along West Bloss St. to Perry St. W. M. Dame is City Clk.

WILLIAMSPORT, PA.—Bids will be received until May 24 by the Highway and Sewer Committee, J. J. Galbraith, City Clk., for the construction of storm water sewers in Hepburn and Sixth Sts.

*WASHINGTON, D. C.—Bids will be received by the Commissioners of the District of Columbia until May 8 for the installation of sewers. For further particulars see advertisement in this issue.)

*NORFOLK, VA.—Bids will be received at the office of the Board of Control, Norfolk, Va., until 12.30 p. m., May 16, for furnishing, delivering and installing three electrically driven centrifugal sewer pumps, including electrical apparatus, switchboard, etc. W. T. Brooker is City Engr. For details see advertisement in this issue.

HUNTINGTON, W. VA.—Bids will be received by the City Board of Commissioners until May 8 for the installation of lateral sewers. A. B. Maupin is City Engr.

CINCINNATI, OHIO.—Bids will be received until April 28 by the Director of Public Service for the construction of main and lateral sewers and drains with their appurtenances in Atkinson St., between Clifton Ave. and Moerlein Ave. J. J. Wenner is Clk.

CLEVELAND, OHIO.—Bids will be received by the Director of Public Service, Room 104, City Hall, until May 5 for sewer construction in the following streets: Bessemer Ave., Southeast, between East 88th St. and East 93d St.; East 88th St., between Laisy Ave. southeast and Harris Ave.; Harris Ave., Southeast, between East 88th and East 93d St.; Marshall Ave., Southeast, between East 88th St. and East 93d St.; Pensaloca Ave., Southwest, between West 39th St. and 200 ft. west of West 42d St.; East Branch of Dugway Brook interceptor between Main Interceptor and Sellars Ave., Southeast; that part of Lorain Ave., between West Boulevard, West 117th St. which lies between West Boulevard and West 110th St.

Bids will be received until April 27 by C. B. Lea, 104 City Hall, for sewer construction.

DAYTON, OHIO.—All bids received for the construction of sewers in the district lying north of Victor St. have been rejected, none being within the City Engineer's estimate, which was $15,590.

EAST YOUNGSTOWN, OHIO.—Bids will be received by the Village Council until May 22 for furnishing the necessary labor, material and tools to construct a sewer on Wilson Ave., from the easterly limits of said Village to the southeast corner of village lot No. 680. J. P. Carney, Vil. Clk.

IRONTON, OHIO.—Bids will be received by the Director of Public Service until noon, May 4, for the installation of a storm sewer. F. A. Ross is Clk.

WEST LAFAYETTE, OHIO.—Bids will be received by E. L. Thompson until May 1 for the installation of a storm water sewer. M. C. Jones is Mayor.

YOUNGSTOWN, OHIO.—Bids will be received by the Director of Public Service until April 27 for the installation of sewers. W. H. McMillin is Clk.

DECATUR, IND.—The Board of Commissioners of Adams County will receive bids until May 1 for furnishing and delivering c.-i. sewer pipe.

✚RICHMOND, IND.—The contract has been awarded to HIPSKIND & SON, Wabash, Ind., for the installation of a sanitary sewer between 20t hand 21st Sts.

SOUTH BEND, IND.—The Dept. of Public Works will receive bids until May 5 for sewer construction in various streets. A. P. Parley is Clk.

ANTIGO, WIS.—Bids will be received by G. O. Palmiter, City Clk., until May 17 for labor and materials necessary to install 11,537 ft. of 10, 18, 20 and 24-in. vitrified pipe sewer. W. G. Kirchoffer, 31 Vroman Bldg., Madison, Wis., is Engr.

APPLETON, WIS.—Bids will be received by E. L. Williams, City Clk., until April 29 for the installation of a sewer on Outagamie and Lenox Sts.

✚KENOSHA, WIS.—The Board of Public Works has awarded the contract for construction of the new trunk sewer to the N. F. REICHERT CO., Racine, Wis., at $81,-000.

REEDSBURG, WIS.—Bids will be received until May 17 by A. H. Huebig, City Clk., for the construction of 3,000 lin. ft. of 18 and 30-in. trunk sewers. H. E. French, Baraboo, Wis., is Engr.

YANKTON, S. DAK.—John W. Summers, City Audr., will receive bids until May 1 for the installation of a lateral sewer in Yankton.

ABERDEEN, S. DAK.—Bids will be received by F. W. Raymond, City Audr., until May 15 for the construction of 1,430 ft. of *8-in. sewer and 430 ft. of 12-in. pipe sewer and five manholes.

BOONVILLE, MO.—Bids will be received by the City Council until May 1 for the construction of sewers. Charles G. Miller is City Clk.

SAPULPA, OKLA.—Bids will be received until 2 p. m., April 28, for the construction of sewers at a cost of $50,000. Ira J. Anderson is City Clk.

SPOKANE, WASH.—Plans have been completed by the City Engineer for sewer improvements. The proposed sewer, known as First Ward sub-trunk sewer No. 9, is to cost $83,306, according to estimate. It provides for a sewer in Browne and Bernard Sts., from 21st to 29th Aves.; 28th and 27th Aves., from Bernard to Tekoa Sts.; Division St., from 25th to 29th Aves.; 29th Ave., from Washington to Tekoa Sts.; Park Drive and other streets in the vicinity.

✚CALEXICO, CAL.—The contract has been awarded to WATSON & SPICER, Colorado Springs, Colo., for the construction of sewers at $26,650.

*EDMONSTON, ALTA.—Bids will be received by the City Commissioners until 3 p. m., May 2, for the supplying of all materials and the construction, in tunnel, of a concrete sewer 10 ft. 6 ins. in internal diameter and approximately 3,290 ft. long. (For further particulars see advertisement.)

## GARBAGE DISPOSAL.

*(✚Denotes a contract awarded.)*

BOSTON, MASS.—The following bids were received on April 24 by Louis K. Rourke, Comr. Pub. Wks., for refuse disposal for a term of ten years from Jan. 1, 1912: Daniel P. Sullivan, Boston, garbage, $24,995 per annum; and ashes, 24.9 cts. per ton. Jeremiah P. O'Riordan, of Charlestown, Mass., all refuse, $197,000, the first year, with annual increase of 2.1%. Boston Disposal Co., Boston, $234,940, the first year, with annual increase of 2.1%, not, however, to handle any refuse in West Roxbury or East Boston. Vulcan Incinerating Co. offered to build two incinerators for $348,500, and to operate them for 66⅔ cts. per ton, and, in addition, to furnish resulting power, light and heat, and to fill specified lands. Frank P. Neelon & Co., $189,000 per annum. Boston Development & Sanitary Co., $220,000 per annum, the company to build four reduction stations, or to build six smaller stations, $184,000 per annum, or with eight stations, $210,000 per annum, or with five other stations, $200,000 per annum. Joseph Marrone, New York, 52 cts. per ton, or $200,000 per annum, with 2% yearly increase.

GARDNER, MASS.—Bids will be received until May 1 by the Board of Health for the collection of garbage.

✚ROCHESTER, N. Y.—The contract for constructing the new incinerating plant for the disposal of rubbish has been awarded by the Board of Contract and Supply to the DE CARIE INCINERATOR CO., of Minneapolis, Minn., at $82,950.

COLUMBUS, OHIO.—Bids will be received by H. S. Holton, Dir. Pub. Ser., until May 4, for the necessary labor and materials for the construction of a reduction plant for the Garbage Department.

## STREETS AND ROADS.

*(*Denotes that this work is advertised in Engineering News.)*

✚BOSTON, MASS.—The contract for repairing tar concrete sidewalks in various sections of the city has been awarded to the LOWE-ARMINGTON CO., at 69 cts. per sq. yd. for three-layer work, 49 cts. for two-layer, and 34 cts. for wearing surface. The other bids were: W. A. Murtfeldt Co., $1, 75 cts., 50 cts.; Warren Bros. Co., $1, 75 cts., 60 cts.; Simpson Bros. Corporation, $1, 75 cts., 55 cts.

✚The Massachusetts Highway Comn., Harold Parker, Chn., has awarded the contracts for building 5,600 ft. of macadam roadway in Charlton, from the end of the 1910 layout toward the village, to R. F. HUDSON, Wilmington, Mass., at $7,380. Other bids were: Lane Construction Corp., Meriden, Conn., $7,451; F. J. Mague, W. Newton, $7,778; Martin & Condon, Watertown, $7,995; Thos. Bruno, Revere, $8,097; M. L. Carnarco, Lee, Mass., $8,142; F. E. Ellis, Melrose, $8,431.

✚For building 9,100 ft. macadam roadway in Lanesboro, from the Cheshire line toward Pittsfield, to M. L. MAMARCO, Lee, Mass., at $11,901. The other bidders were: D. Hammond & Bro., Pittsfield, Mass., $12,563; Wm. R. Pratt, Dalton, Mass., $12,665; J. W. Polcaro, Pittsfield, $13,543; Crowe & Walsh, Pittsfield, $13,648; R. F. Hudson, Wilmington, Mass., $13,670; Frank Williams, Boston, $16,285.

✚For building 350 ft. macadam road and a concrete bridge in Townsend, awarded to D. H. DAMON, Ashby, at $2,623.

Bids will be received until May 2 by Louis K. Rourke, Comr. Pub. Wks., for constructing 10,000 sq. yds. brick block pavement in Geneva Ave. and curbs, gutters and crosswalks in River St. and Melville Ave., all in Dorchester District.

Bids will be received until May 1 for constructing artificial stone sidewalks in Melville Ave., Dorchester District, and sidewalks and tar macadam roadway in Ardale St., West Roxbury Oistrict.

✚BOSTON, MASS.—The following bids were received on April 17 for constructing a tar macadam roadway, trap rock, in Granville St., Dorchester District: CONNOLLY & DIAMOND, $5,518 (awarded contract); William J. Rafferty & Co., $5,663; John F. O'Connell, $5,779; F. S. & A. D. Gore, Corpn., $5,794; John Kelly & Co., $5,806; Timothy F. Bradley, $5,818; John McCourt & Co., $5,820; D. M. Biggs & Co., $5,920; James Doherty, $5,978; J. H. Ferguson, ..6,409; R. J. Young & Co., $7,289; Daniel E. Lynch, $7,348.

✚The contract for constructing a tar macadam roadway in Ainsworth St. with trap rock, was awarded on April 17 to JOHN KELLY & CO., at $6,599. The other bidders were West Roxbury Trap Rock Co., $7,499; William J. Rafferty & Co., $7,990.

PROVIDENCE, R. I.—The Highway Committee has appropriated $5,000 for paving Sixth St. Walter F. Slade is Comr. Pub. Wks.

✚HARTFORD, CONN.—We are offcially advised that the contract for laying approximately 18,000 sq. yds. of asphalt pavement was awarded on April 11 to the SOUTHERN NEW ENGLAND PAVING CO., 26 State St., Hartford.

NEW HAVEN, CONN.—Bids will be received by C. W. Kelly, City Engr., until April 28, for laying sidewalks of Portland cement concrete in various parts of the city.

NEW YORK, N. Y.—Bids will be received by Calvin Tomkins, Comr. of Docks, until noon, May 4, for furnishing all the labor and materials required for paving with asphalt the decks of certain piers on the East and Harlem Rivers, Boroughs of Manhattan and Brooklyn.

NEW YORK, N. Y.—Bids will be received by Alfred E. Steers, Pres. Boro. Brooklyn, until 11 a. m., May 3, for grading, curbing, paving, regulating, etc., portions of various streets.

ALBANY, N. Y.—The bids received by the Board of Contract and Supply on April 17, for improving West Lawrence St. from Webster Ave. to Hudson Ave. were: Edward F. Dillon, Albany, $7,042; Kennedy Construction Co., Albany, $7,251; Patrick W. Mulderry, Albany, $6,292; John M. Holler, Albany, $5,882. Walter Melius is City Engr.

*ALBANY, N. Y.—Bids for the improvement of public highways by State aid were received by the State Commission of Highways, Albany, on April 24, as follows: Stottsville-Stuyvesant Falls, State Highway No. 5,103, Columbia County, length five miles: Powers & Mansfield Co., Troy, N. Y., $68,614 (Residuum), $71,303 (Bermudez) and $70,631 (Trinidad); Lane Construction Co., Meriden, Conn., $66,500, $69,200 and $68,500; Thos. H. Karr, Troy, N. Y., $62,500, $65,200 and $64,500; Buckley Construction Co., Plattsburg, N. Y., $62,948, $65,637 and $64,965; James E. Martin, Poughkeepsie, N. Y., $74,000, $77,300 and $76,500; J.C. Hourigan, Albany, $62,320, $64,000 and $64,000; Joseph Walker, New Paltz, $61,321, $63,237 and $63,876; Olin T. Benedict, Pittsfield, Mass., $75,000, $77,000 and $77,000.

Stuyvesant Falls-Valatie, State Highway No. 5,104, Columbia County, 4.5 miles: J. C. Hourigan, Albany, $59,690 (Residuum), $61,890 (Bermudex) and $61,890 (Trinidad); Lane Construction Co., Meriden, Conn., $62,401, $65,881 and $65,011; Joseph Walker, New Paltz, $59,701, $62,181 and $63,007; Olin T. Benedict, Pittsfield, Mass., $59,999, $62,000 and $62,000; Buckley Construction Co., Plattsburg, $60,340, $63,820 and $62,950; Thomas H. Karr, Troy, $60,300, $63,800 and $62,900.

✚Stottsville-Stuyvesant Falls, State Highway No. 5,103 and Stuyvesant Falls-Valatie, State Highway No. 5,104, combined, 10.85 miles: J. C. HOURIGAN, Albany, $118,440 (Residuum), awarded contract), $121,440 (Bermudez), and $121,440 (Trinidad); Joseph Walker, New Paltz, $120,922, $125,318 and $126,783.

✚Blodgett Mills-Cortland, County Highway No. 881, Cortland County, 1.79 miles: Kennedy Construction Co., Albany, $23,673; JOSEPH McCORMICK, East Providence, R. I., $22,780 (awarded contract).

✚Red Hook-Rhinebeck, State Highway No. 5,092, Dutchess County, 4.15 miles: SUFFOLK CONTRACTING CO., Huntington, $40,990 (Residuum) (awarded contract), $43,478 (Bermudez) and $44,225 (Trinidad); Joseph Walker, New Paltz, $44,367, $46,826 and $46,211; James E. Martin, Poughkeepsie, $46,484, $49,200 and $48,600; Harvey B. Sproul, Peekskill, $45,000, $48,000 and $49,000; W. J. Cowhig, Poughkeepie, $43,775, $46,039 and $46,039; Samuel Beskin, Fishkill-on-Hudson, $41,000, $43,500 and $42,900; Lane Construction Co., Meriden, Conn., $46,500, $49,100 and $48,400.

✚Road No. 5,095, Red Hook Village-Dutchess County, 1.33 miles: W. J. COWHIG, Poughkeepsie, N. Y., $12,280 (Residuum), (awarded contract), $13,062 (Bermudez) and $13,062 (Trinidad); Lane Const. Co., Meriden, Conn., $13,863, $14,687 and $14,481; Suffolk Contracting Co., Huntington, N. Y., $12,948, $13,772 and $13,978; Joseph Walker, New Paltz, N. Y., $13,467, $14,250, and $14,054; Saml. Beskin, Fishkill-on-Hudson, $12,800, $13,800, and $13,400; Town Board, Town Red Hook, $14,019, $14,998, and $14,817; Jas. E. Martin, Poughkeepsie, N. Y., $16,200, $17,200, and $17,000; Harper, Jovah & Kehoe, Newburgh, N. Y., $13,600, $14,400, and $14,200.

✚Road No. 913, Ellicott Creek, Erie County, 1.82 miles; LOUIS R. GIPP, Buffalo, $38,990 (awarded contract), Frank Foote, Nunda, N. Y., $39,520; Frank L. Cohen, Buffalo, N. Y., $39,200; Busch & Percival, Buffalo, N. Y., $42,990; John W. Landal, Tonawanda, $39,495; Northwestern Construction Co., Franklin, Pa., $44,634; Erie Construction Co., Buffalo, N. Y., $46,000; Constantine Construction Co., Buffalo, N. Y., $42,291.

✚Fonda, Johnstown Road, No. 5096, Fulton & Montgomery Counties, 3.07 miles: Baker & Banker, Gloversville, $48 500 (Residuum), $49,500 (Bermudez), and $49,200 (Trinidad); The Dale Engineering Co., Utica, N. Y., $42,700, $44,200, and $44,200; THE HOLLINGTON CO., Troy, N. Y., $37,970, $39,370, and $39,000 (awarded contract); Fred E. Ellis, Melrose, Mass., $46,418, $47,826, and $47,474; Alonzo Schaupp, Albany, $45.845, $47,550, and $47,200; Flood & Van Wirt, Hudson Falls, $44,500, $45,908, and $45,908; Brown & Lowe, Schenectady, $44,900, $46,215, and $45,961.

✚Salisbury Center, Burrels County, Highway No. 465, Herkimer County, 5.43 miles: BROWN & LOWE, Schenectady, $52,147 (awarded contract); Jos. McCormick, East Providence, R. I., $55,819; Buckley Construction Co., Plattsburg, $54,000.

✚Livonia-Lakeville, County Highway No. 716, Livingston County, 2.22 miles; CARLTON-REYNELL, Long Island City, $17,950 (awarded contract); Schroeder-Hicks Construction Co., Rochester, $19,565; Northwestern Construction Co., Franklin, Pa., $22,059.

✚De Ruyter-Lawsons Forks, County Highway No. 883, Madison County, 2.14 miles; JOS. McCORMICK, East Providence, R. I., $23,973 (awarded contract).

St. Johnsville-Nelliston, State Highway No. 5109, Montgomery County, 4.79 miles; Buckley Construction Co., Plattsburg, $53,500, $56,500, $55,750; Jos. Walker, New Paltz, $54,564, $57,564, $56,814; John E. Consalus, Albany, $51,420, $52,820, $52,820; Richard Hopkins, Troy, $53,814, $57,000, $57,000; Brown & Lowe, Schenectady, $55,064, $58,064, $57,314; Fred, E. Ellis, Melrose Mass., $53,326, $56,326, $55,576; D. I. Snell & Co., Canajoharie, $58,076, $61,076; $60,326.

✚E. Norwich Memorial Cemetery, Road No. 858, Nassau County, 2.88 miles: Andrews Bros., Mineola, N. Y., $39,848 (Residuum), $41,070 (Bermudez), and $41,069 (Trinidad; H. J. MULLEN, Jamaica, N. Y., $37,000 (awarded contract on Bermudez), $38,800, and $38,800; J. J. Cashman, Brooklyn, $40,502, $42,324, and $41,868; Clancy & Van Alst, Astoria, N. Y., $39,737, $40,537, and $40,537.

East Wood Village—East Syracuse Road, No. 896, Onondaga County, 2.43 miles: Aetna Engineering & Contracting Co., Utica, $29,649 (Residuum), $31,109 (Bermudez)' and $31,000 (Trinidad); Greene Construction Co., Rochester, $27,400, $28,960, and $29,000; Central City Paving Co., Syracuse, $28,400, $29,860, and $29,860; W. J. BURNS CO., Syracuse, $27,111 (awarded contract on Residuum), $28,361, and $28,266; Monroe Roads Co., Pittsford, $28,800, $30,200, and $29,900; J. H. Weidman, Syracuse, $29,560, $31,380, and $31,380.

✚Newburg-Cornwall Road, No. 415, Orange County, 3.37 miles: E. W. Peck, Stratford, Conn., $33,700 (Residuum), $34,800 (Bermudez), $34,950 (Trinidad); Suffolk Contracting Co., Huntington, $34,601, $35,751, and $35,981; James E. Martin, Poughkeepsie, $34,500, $35,600, and $35,400; Schunnemunk Contracting Co., Highland Mills, $36,390, $37,320, and $37,090; Samuel Boskin, Fishkill-on-the-Hudson, $33,500, $34,400, and $34,100; Sproul & Elsin Co., Inc., Peekskill, N. Y., $34,000, $35,000, and $35,000; HARPER, JOVA & KEHOE CO., INC., Newburg, N. Y., $30,990 (awarded contract on Bermudez), $31,900, and $31,600; Pollock & Angle, Newburg, N. Y., $34,500, $35,075, and $35,075.

✚Brewster-Carmel Road No. 909, Putnam County, 4.56 miles. L. W. Peck, Stratford, Conn., $46,868 Residuum, $49,400 Bermudez, $49,900 Trinidad; Samuel Boskin, Fishkill-on-Hudson, $48,000, $50,000, $49,600; Amos D. Bridges' Sons, Inc., $51,107, $53,517, $53,019; C. F. Jordan Co., Goldens Bridge, $49,465, $51,876, $51,876; HARVEY B. SPROUL, Peekskill, $45,800 (awarded contract on Residuum), $47,400, $49,000; Olin T. Benedict, Pittsfield, Mass., $47,999, $49,999, $49,999; Jas. E. Martin, Poughkeepsie, $50,496, $53,500, $53,000; B. D. Pierce, Jr., Co., Bridgeport, Conn., $50,454, $52,866, $52,263.

✚Brewster Village, Putnam County, Road No. 5098, 1.14 miles, C. F. Jordan & Co., Goldens Bridge, $16,449 Residuum, $17,541 Bermudez, $17,541 Trinidad; Jas. E. Martin, Poughkeepsie, $16,900, $18,000, $17,800; Amos D. Bridges' Sons, Inc., $17,553, $18,562, $18,310; E. W. Peck, Stratford, Conn., $16,967, $18,200, $18,400; SAMUEL BESKIN, Fishkill, N. Y., $15,900 (awarded contract on Residuum), $16,800, $16,500; Harvey B. Sproul, Inc., Peekskill, N. Y., $17,000, $18,000, $19,000; Olin T. Benedict, Pittsfield, Mass., $19,000, $20,000, $20,000.

✚Rensselaer City Road No. 5,107, Rensselaer County, .40 miles: Kennedy Construction Co., Albany, $7,573 (Residuum), $7,800 (Bermudez) and $7,767 (Trinidad); WILTSEYO & RIGNEY, Rensselaer, N. Y., $7,468 (awarded contract on Residuum), $7,700 and $7,642; Krow & Walsh, Pittsfield, Mass., $7,500, $7,750 and $7,690.

✚Thurston-Campbell Road No. 903, Steuben County, 2.07 miles: T. H. Gill Co., Whitneys Point, N. Y., $21,514; Northwestern Construction Co., Franklin, Pa., $22,340; Niagara Construction Co., Corning, N. Y., $20,950; FRED E. ELLIS, Melrose, Mass., $19,902 (awarded contract).

✚Post Road No. 310, Ulster County, 4.25 miles: Clancy & Van Alst, Long Island City, $36,300 (Residuum), $38,450 (Bermudez) and $38,000 (Trinidad); S. B. Van Wagenon, Rondout, N. Y., $37,000, $39,600 and $39,600; Samuel Beskin, Fishkill, $35,000, $37,000 and $36,600; LANE CONSTRUCTION CO., Meriden, Conn., $34,380 (awarded contract on Residuum), $35,550 and $35,993; Wm. H. Ring, Kingston, N. Y., $34,950, $37,900 and $37,100; James E. Martin, Poughkeepsie, $38,496, $41,000 and $40,500; Joseph Walker, New Paltz, N. Y., $40,518, $42,756 and $42,196; Suffolk Contracting Co., Huntington, N. Y., $38,081, $40,233 and $40,771; Sproul & Elsin, Inc., Peekskill, N. Y., $36,950, $39,500 and $40,000; De Graff & Hogeboom, Kingston, N. Y., $35,398, $37,550 and $37,550; Hollick & Angle, Newburgh, N. Y., $37,000, $38,613 and $38,613.

✚Macedon-Cator Four Corners Road No. 918, Wayne County, 1.16 miles: BELLEW & MERRITT, Tuckahoe, N. Y., $8,999 (awarded contract); Greece Construction Co., Rochester, N. Y., $9,870.

✚Cross River-Crafts Corners, Road No. 899, Westchester County, 5.68 miles: E. W. Peck, Stratford, Conn., $70,000 (Residuum), $73,800 (Bermudez) and $74,000 (Trinidad); Amos D. Bridges' Sons, Inc., $67,979, $69,957 and $69,197; Olin T. Benedict, Pittsfield, Mass., $65,000, $67,000 and $67,000; Harvey B. Sproul, Inc., Peekskill, N. Y., $65,500, $67,700 and $70,000; James E. Martin, Poughkeepsie, N. Y., $66,698, $70,000 and $69,900; Dunbar Contracting Co., New York City, $65,000, $68,495 and $67,725; FRANK G. FOWLER, Mt. Kisco, N. Y., $64,512 (awarded contract on Residuum), $67,591 and $67,591.

✚Castile-Castile Center, Road No. 892, Wyoming County, 1.43 miles: FREDERICK J. MUMM, Buffalo, N. Y., $15,800 (awarded contract, $16,700 and $1[illegible]; Greece Construction Co., Rochester, [illegible] $17,900, $18,860 and $18,660; Niagar[a Construction Co.,] Corning, N. Y., $17,500, [illegible] and $18,2[illegible].

✚Indian Falls-Corfu, P[illegible] Road No. 922, Genesee County, 1.85 [illegible] MILLER & KNICKENBERG, Buffalo, N. Y., $15,9[illegible] (awarded contract on Re[siduum]) [illegible] $16,946 and $16,695: Huchnall Constru[ction] Co., Albion, N. Y., $16,407, $17,400 an[d] [illegible].

✚Pavilion-Batavia, Par[illegible] Road No. 921, Genesee County, 4.70 m[iles]: Frederick J. Mumm, Buffalo, N. Y., $4[illegible] MILLER & KNICKENBERG, Buffalo, N. Y., $42,[illegible] (awarded contract).

TROY, N. Y.—Estimates [illegible] cost of improving the main thorou[ghfares] leading to the city have been pre[pared by the] City Engineer. The estimate [illegible] follows: On Mill hill road, $24,000; [illegible] Wood Ave., $10,000; Hoosick St., $[illegible] Brunswick road, $25,000; Pine Woo[d] [illegible] $10,000; Spring Ave., $10,000; Ma[illegible] $12,000; Burden Ave., $7,000; in[illegible] and inspection, $2,000; total, $12[illegible] Edwin L. Grimes is City Engr.

NORTH BRADDOCK ([illegible] post-office), PA.—Bids will be re[ceive]d by C. A. Stewart, Boro. Engr., until A[pril] 28, for paving portions of Ridge Ave., [illegible] 13th and several other streets.

CANONSBURG, PA.—Bids will be received until 1 p. m. April 2[illegible] by the Board of Road Supervisors of Cha[rtiers] Township for furnishing 2,700 cu. yds. [of] limestone of good quality.

EASTON, PA.—Bids for constructing 6[illegible] miles of macadam road have been received as follows: Salmon Bros., [Net]cong, $49,306 (recommended for award); M. Irving Demarest, Sewaren, $57,067; J. Allen, Netcong, $77,992; James E. [illegible]ley, Paterson, $81,796.

McKEES ROCKS, PA.—Bids will be received by George H. McG[illegible]ess, Boro. Engr., until 8 p. m. May 1, for grading, paving and curbing Woodward Ave., Bruce and Raymond Sts., and Robb St. extension, and for constructing 400 lin. ft. of 12-in. sewer on Robb St. extension. Plans and specifications may be seen and blanks for bidding may be obtained at the office of the Borough Engineer, corner Chartiers Ave. and Linden St., Boro of McKees Rocks, Pa.

PHILADELPHIA, PA.—Bids will be received by the Department of Public Works, George R. Stearns, Dir., until noon, May 1, for repairing asphalt paved streets occupied by tracks of the Philadelphia Rapid Transit Co., and repairing granite blocks or other character of pavement laid between rails or in the dummy. The sum available for this work ih $200,000.

PLYMOUTH, PA.—Bids will be received by the Plymouth Borough Council, George B. Shonk, Chn., until 7.30 p. m., May 1, for repaving Main St. with vitrified paving block. For specifications, plans, bidding blanks and other information, consult Abbott & Howells, Boro. Engrs., Coal Exchange Bldg., Wilkes-Barre, Pa. Bids are to be addressed to George J. Curran, Boro. Secy., Plymouth.

✚YORK, PA.—The contract for improving six miles of state highway in Springfield Township has been awarded to REILLY FRITZ & CO., Lancaster, Pa., at $40,921.

WILMINGTON, DEL.—Bids will be received by F. A. Price, State Highway Comr., until May 2, for constructing a water-bound macadam road, known as the Kennett Square Road, about 3 miles long, and resurfacing the Depot Road, about ¾ mile.

BALTIMORE, MD.—Bids will be received by the State Roads Commission, John M. Tucker, Chn., Union Trust Bldg., Baltimore, until May 10, for building 20 sections of state highways, a total of 57.1 miles, and one concrete bridge.

WASHINGTON, D. C.—Bids will be received by the District Commissioners, Cuno H. H. Rudolph, Chn., until April 27, for furnishing about 25,300 gallons bituminous binding material for use in constructing bituminous macadam roads in the District of Columbia.

Bids will be received by the District Commissioners until 2 p. m., May 6, for paving various streets and avenues with sheet asphalt.

*WASHINGTON, D. C.—Bids will be received by the District Commissioners until 2 p. m. May 6, for laying asphalt block pavements.

WASHINGTON, D. C.—Bids were received on April 22 by the Commissioners of the District of Columbia for paving repairs for the years ending June 30, 1912 and June 30, 1913, as follows:

Item (1) laying standard asphalt pavement (2½-in. surface, 2-in. binder, before compression), with 6-in. concrete base; (2) laying standard asphalt surface (2½-in. before compression); (3) laying standard asphalt surface (resurfacing by heater method; (4) laying asphalt binder (in connection with resurfacing work); (5) laying standard asphalt surface (for repairs, etc.); (6) laying asphalt binder for same; (7) laying standard asphalt surface for repairs within space occupied by street railways; (8) laying asphalt binder for same. On each (A) natural pitch-lake asphalt; (B) using any asphalt within specifications.

F. E. Schneider Paving Co., Baltimore, Md., on (A), Item (1) $2; (2) 88 cts.; (3) 86 cts.; (4) 36 cts.; (5) 5[illegible] cts.; (6) 42 cts.; (7) 64 cts.; (8) 55 cts. on (B), Item (1) $1.92; (2) (3) 83 c[ts.]; (4) 34 cts.; (5) 52 cts.; (6) 44 cts.; (7) 60 cts.; (8) 50 cts.

Cranford Paving Co., Washington, on (A), $1.68; (2) 64 cts.; (3) 66 cts.; (4) 28 cts.; (5) 57 cts.; (6) 43 cts.; (7) 6[illegible] cts.; (8) 48 cts.; on (B), Item (1), $1.[illegible] (2) 61 cts.; (3) 64 cts.; (4) 27 cts.; ([illegible]) 54 cts.; (6) 42 cts.; (7) 60 cts.; (8) 47 cts.

Barber Asphalt Paving Co., Philadelphia, on (A), Item (1) $1.78; (2) [illegible] 77 cts.; (4) 28 cts.; (5) 57 cts.; (6) 41 cts.; (7) 62 cts.; (8) 52 cts.——Eastern Asphalt Pav-

ing Co., New York, on (B), (1) $1.70; (2) 83 cts.; (3) 63 cts.; (4) 29 cts.; (5) 68 cts.; (6) 32 cts.; (7) 68 cts.; (8) 32 cts.

PORTSMOUTH, VA.—E. Parke Lindsay, Portsmouth, was lowest bidder at 74½ cts. per sq. yd. for the construction of a macadam roadway on Cottage Toll Bridge road, through Lafayette Residence Park. Alvah H. Martin is Chn. Permanent Road Improvement Comn.

✚CLARKSBURG, W. VA.—The contract for paving West Milford Pike in Harrison County has been awarded to W. T. GATES & CO., Clarksburg, at $8,230.

✚CHARLESTON, S. C.—We are officially advised that contracts for street improvement have been awarded as follows: For constructing concrete sidewalks, to R. E. & E. N. BEATY, at 84 cts. per sq. yd.; for paving with vitrified brick, to the CHARLESTON ENGINEERING & CONTRACTING CO., at $1.44 per sq. yd. The cost of the work is estimated at $27,000. Noted on March 23.

✚COLUMBIA, S. C.—We are officially advised that the contract for paving and curbing various streets has been awarded to WESTON & BROOKER, Columbia, at $2.45 per sq. yd. for Westrumite block, and $2.19 per sq. yd. for vitrified brick; and to GEORGE O'LENNY, Richmond, Va., at $2.12 per sq. yd. for bitulithic. Noted on April 6.

JACKSONVILLE, FLA.—Bids will be received by the Board of Public Works, P. A. Dignan, Chn., until 2.30 p. m., May 12, for grading, curbing and paving with vitrified blocks Davis, Fifth, Market, Liberty, Washington, Monroe and other streets, according to plans and specifications on file in the office of the Board of Public Works.

✚BUNKIE, LA.—The contract for constructing a road and canal from Bunkie to Bayou Dulae has been awarded to S. J. BURLIN, Cottonport, La., at $22,700.

AKRON, OHIO.—We are officially advised that all the bids received on April 12 for constructing cement sidewalks, were rejected, and the work will be readvertised. C. C. McCue is Clk. Bd. of Control. Noted on April 6.

✚BEACH CITY, OHIO.—We are officially advised that the contract for paving Main and West Sts. with vitrified block on a gravel foundation was awarded on April 17 to T. J. NORMAN & SON, Coshocton, Ohio, at $12,195. There were ten bids in all. Noted on April 6.

COLUMBUS, OHIO.—We are officially advised that the lowest bids received on April 14 for paving various streets were as follows: Beech St., from Forest to Schiller St., S. T. Knight, Portsmouth and Trimble block, $9,325; Bartham Ave., from High St. to Parsons Ave., Wm. M. Graham, Trimble block, $21,408; Stone Ave., from Nicholas to 18th Sts., J. C. Beasley, Trimble, Portsmouth, Nelson block, $7,788; Reeb Ave., from High to Seventh Sts., Wm. M. Graham, Trimble block, $12,235; Town St., from Hawkes to Central Ave., D. E. Sullivan & Son, Nelson, Trimble block, $14,932; Pendleton Ave., from Raymond St. to Livingston Ave., J. C. Beasley, Nelson, Portsmouth, Trimble block, $6,903; Summit St., from Eleventh Ave. to Hudson St., G. W. Patterson & Son, Nelson, Townsend block, $64,582; Columbus St., from Front St. to Parsons Ave., S. T. Knight, Portsmouth, Trimble block, $25,395. Noted on April 6.

SPRINGFIELD, OHIO.—Bids will be received by the Director of Public Service, William H. Mahoney, Clk., until noon, April 28, for constructing sidewalks, grading, curbing and guttering on various streets during the present year.

CHARDON, OHIO.—Bids will be received by the Commissioners of Geaugh County until noon, May 6, for grading and paving with brick 2.04 miles of road in Hambden Township, under the provisions of Sec. 6903 and following General Code of Ohio. Specifications, plans and profiles are on file in the office of the County Commissioners at Chardon. H. A. Cowles is Clk, of Comrs. and County Audr.

CINCINNATI, OHIO.—Bids will be received by the Board of Commissioners of Hamilton County until noon, May 19, for improvement of Compton road, from Colerain Township line 1,600 ft. east, in Springfield Township; for macadamizing extension of Struble road, from Pippin road to Hamilton pike, in Colerain and Springfield townships; for repairing Colerain pike, from the north corporation line of Mt. Airy to Poole road in Colerain Township; for repair of Bond road, from Montgomery pike to Camargo pike, in Sycamore and Columbia townships. Stanley Struble is Pres., and Fred Dreihs Clk of Bd.

COLUMBUS, OHIO.—Bids will be received by the Board of Commissioners of Franklin County, until May 17, for grading and macadamizing as follows: The Stahl road from the Harrisburg pike to the line between Franklin and Pickaway counties; the Wilcox road, from the Dublin pike to the Post road; the Ring road, from the Columbus and Dublin pike to the Madison County line; the Avery road, from the Wolpert and Ring pike to the Delaware and Union County line.

COSHOCTON, OHIO.—Bids will be received by the Auditor of Coshocton County until May 4 for the improvement of that part of the Coshocton-Warsaw road extending from Roscoe to the Maxwell Canal bridge.

YOUNGSTOWN, O.—Bids will be received by the Director of Public Service, W. H. McMillin, Clk., until noon, May 5, for paving Market St. from the viaduct to Warren Ave.

ENGLISH, IND.—Bids will be received by the Commissioners of Crawford County, until 1 p. m., May 1, for constructing 9,950 ft. of pike road in Liberty Township. J. Evan is County Audr.

FOWLER, IND.—Bids will be received by the Commissioners of Benton County, until 1 p. m., May 1, for constructing a free stone road on the Bolivar and Oak Grove Township line.

LOGANSPORT, IND.—Bids will be received by the Commissioners of Cass County until May 9 for constructing three roads in Tipton Township, and the Frank E. Gibson Road in Jefferson Township. John E. Wallace is County Audr.

✚WABASH, IND.—We are officially advised that the contract for grading, paving and curbing Manchester Ave. was awarded on April 20 to the WESTERN CONSTRUCTION CO. at $33,800. The bids for this work were received on April 10 as noted on April 6.

BLUFFTON, IND.—Bids will be received by the Commissioners of Wells County until 1 p. m. May 4, for constructing two stone roads in Jefferson Township. O. D. Garrett is County Audr.

ROCKPORT, IND.—Bids will be received by the Commissioners of Spencer County until 10 a. m. May 2, for constructing two public Highways in Ohio Township, John T. White is County Audr.

✚RUSHVILLE, IND.—The County Commissioners have awarded contracts for roads as follows: The Alsman road in Posey Township, to O'CONNOR BROS., Crawfordsville, Ind., at $11,000; the Brown road in Anderson Township to COLTER BROS., of that Township, $6,890; the Township line road, between Posey and Ripley Townships, to O'CONNOR BROS., at $13,913.

SALEM, IND.—Bids will be received by the Commissioners of Washington County until 1.30 p. m. May 1, for constructing a road in Gibson Township, Frank S. Munket is County Audr.

VERNON, IND.—Bids will be received by the Commisisoners of Jennings County until 11 a. m. May 1, for the construction of three miles of pike road in Vernon Township. M. W. Brogan is County Audr.

WINAMAC, IND.—Bids will be received by the Commissioners of Pulaski County until noon May 2, for constructing a gravel road in Salem and Beaver townships.

✚HOLLAND, MICH.—The contract for paving Central Ave., from Eighth to 18th Sts., has been awarded to HARRY VAN DER VEEN, Grand Rapids, Mich. The street will be paved with Bermuda asphalt upo ncon a crete base, and will cost $17,613.

DETROIT, MICH.—J. J. Haarer, Comr. Pub. Wks., will soon ask bids for paving several streets and alleys, estimated at $14,000.

BATAVIA, ILL.—Bids will be received by the Board of Local Improvements until 4 p. m., May 1, for paving with macadam and otherwise improving a part of Main St., according to plans and specifications on file with W. H. Reaney, City Clk. T. E. Davis is City Engr.

MADISON, WIS.—Bids will be received until May 10 for constructing asphalt-filled macadam pavement, estimated at $200,000, and brick, asphalt and creosoted block pavement, estimated at $75,000. John F. Icke is City Engr.

RACINE, WIS.—Bids will be received by the Board of Public Works until April 29 for paving with asphaltic concrete or asphalt a portion of North Erie St.

MILWAUKEE, WIS.—Milwaukee County will construct six miles of bituminous macadam boulevard 150 ft. wide, known as the Janesville Plank road. H. J. Knelling, Milwaukee, detailed from the State Geological Survey, is Engr., acting under W. O. Hotchkiss, Ch. of High. Div.

WAUKESHA, WIS.—Bids will be received until May 15 for constructing macadam pavements. The work will include: 4,694 cu. yds. excavation, 4,796 lin. ft. concrete curb and gutter, 4,620 sq. yds. asphalt macadam, 270 sq. yds. brick gutters, 170 lin. ft. storm sewer. Morgan R. Butler is City Engr.

NEW HAMPTON, IOWA.—Bids will be received by F. B. Strike, City Clk., until May 3, for constructing 12,000 sq. yds. of Portland cement paving, and 1,600 ft. of cement curb.

PITTSBURG, KAN.—We are officially advised that this city will receive bids until May 3 for the construction of 4,500 sq. yds. of vitrified brick pavement with concrete base and asphalt filler. L. E. Curfman is City Engr.

✚GRAND FORKS, N. DAK.—We are officially advised that contracts for repaving 45,000 sq. yds. of streets were awarded on April 11 as follows: Dists. Nos. 15 and 16, to the R. S. BLOME CO., Chicago, Ill., at $77,000 and $18,000, respectively; Dist. No. 16, to P. McDONNELL, Duluth, Minn., at $19,000. Noted on April 11.

ST. LOUIS, MO.—Bids will be received at Room 300, New City Hall, until noon, May 5, for reconstructing the following streets: Benton St., from Broadway to 20th St.; 21st St., from Cass to St. Louis Ave.; 25th St., from Cass to St. Louis Ave. Plans, specifications, form of bid and other information can be had at the office of the Board of Public Improvements.

TERREL, TEX.—See item under Water Supply—Irrigation.

✚DALLAS, TEX.—The contract for paving certain streets in Exposition Park Addition has been awarded to the STANDARD ENGINEERING & CONSTRUCTION CO. at $24,697.

✚GREENEVILLE, TEX.—We are officially advised that contracts for paving were awarded, on April 11, as follows: GENERAL PAVING CO., Hot Springs, Ark., 10,000 sq. yds. brick pavement, at $2.24 per sq. yd., 4,000 sq. yds. asphalt concrete pavement, at $1,85 per sq. yd.; TEXAS BITULITHIC CO., 91,000 sq. yds. bitulithic pavement, at $2.29 per sq. yd.; CREOSOTED WOOD BLOCK PAVING CO., 33,000 sq. yds. wood block pavement, at $2.53 per sq. yd.; R. C. STUBBS, 4,000 sq. yds. vitrolithic concrete pavement, at $1.75 per sq. yd.

**WAXAHACHIE, TEX.—The Commissioners' Court of Ellis County has sold bonds for $555,000, and the proceeds will be used to construct about 200 miles of highways.**

✚OKLAHOMA CITY, OKLA.—We are officially advised that the contract for constructing sidewalks, excavating and moving retaining wall back to property line, in front of lots 21 and 22, Block 19, was awarded on April 10, to W. L. EBY, at about $8,000. Noted on April 6.

CHEHALIS, WASH.—Bids will be received by the Town Clerk, until 8 p. m., May 2, for improving portions of A and Seventh Sts.

HOQUIAM, WASH.—Press reports are to the effect that bids will be received by the Commissioners of Chehalis County until May 1 for constructing 20 miles of plank road, estimated at $60,000.

KALAMA, WASH.—Bids will be received by the Commissioners of Cowlitz County, until 10 a. m., May 2, for improving Silver Lake Road near Castle Rock, according to plans and specifications on file with the County Engineer.

LOS ANGELES, CAL.—Bids will be received by the Board of Supervisors of Los Angeles County until 2 p. m., May 1, for grading and paving Foothill Boulevard. H. J. Lelande is County Clk.

✚LOS ANGELES, CAL.—A contract has been awarded to PAONISSA & TAYLOR, Shory Bldg., Los Angeles, for grading streets, constructing curbs and gutters, at the new townsite Pianada at about $80,000.

## MANUFACTURING PLANTS.

(✚*Denotes a contract awarded.*)

BELFAST, ME.—The Saco Valley Canning Co. plans to erect a corn packing plant in this city, it is reported.

An addition to cost $35,000 is to be built to the shoe factory of Leonard & Barrows, according to reports.

✚MANCHESTER, N. H.—The W. H. McElwain Co. has let the general contract for the erection of its buildings in Manchester to FRED T. LEY & CO., of Springfield, Mass. These buildings include a box factory, supply factory and power-house. Noted on March 23.

RUTLAND, VT.—The Howe Scale Co. will soon begin the erection of a foundry at its plant in this city. It will be about 150 x 200 ft. Address John A. Mead, Pres. Cost, $40,000.

✚SPRINGFIELD, MASS.—M. H. Barnett plans to erect a cigar factory at 457 Worthington St. The contract, which has been let to E. T. DAVIS & CO., calls for a building of mill brick construction, 64 × 50 ft., having three stories and basement. The cost of the building will be about $13,000. H. L. Sprague is the Arch. The contract calls for completion by July 1.

WAKEFIELD, MASS.—L. B. Evans & Co., shoe manufacturers, have purchased a tract of land on Water St., Wakefield, and will erect a 5-story building, 50 × 100 ft.

✚PITTSFIELD, MASS.—The contract for the erection of an office and storage building at the Stanley plant of the General Electric Co., has been awarded to A. BENTLEY & SONS CO., Toledo, Ohio. The building will be of brick and steel, 80 × 600 ft. and four stories high.

✚HOLYOKE, MASS.—Y. Y. GODDARD, of Holyoke, has been awarded the contract for the erection of the factory on Chicopee St. for the Doane-Williams Co. The building will be three stories high, 50x100 ft. Ellsworth & Howes, of Holyoke, are the Archs.

The Goetz Silk Mfg. Co. is planning the erection of a factory building on Jackson St. It is to be a 3-story brick building of mill construction, 50 × 250 ft., with brown stone trim, steam heat and freight elevators.

✚SPRINGFIELD, MASS.—Daniel O'Connell's Sons, of Holyoke, general contractors for the plant of the Massachusetts Saw Works, have awarded the following subcontracts: Plumbing, E. H. FRIEDRICH, Holyoke; cut stone, DAVID McCORMICK & SON, Holyoke; iron work, WALSH BOILER & IRON WORKS, Holyoke; metal work and roofing, H. J. PRATT & CO., Springfield. Samuel M. Green, Inc., Springfield, are the Archs.

✚WORCESTER, MASS.—The Worcester Cold Storage Co. has awarded the contract for the erection of a 3-story, brick and concrete storage building, 100 × 100 ft., to the E. J. CROSS CO., INC., of Worcester.

✚The E. J. CROSS CO., INC., has been awarded the contract for the erection of the mill of the Spencer Wire Co. on Webster Court. The building will be 400 × 80 ft., three stories high, of brick and concrete, with two elevators. Noted April 6.

NIANTIC, R. I.—Plans are being prepared by Richard P. Jenks, Engr., Banigan Bldg., Providence, for a factory to be erected for the Bradford Dyers' Association, Ltd., of Bradford, England. The structure will be of brick and heavy mill construction, one story high, 290 × 380 ft. Noted April 6 under "Westerley, R. I."

✚BRIDGEPORT, CONN.—The DOWLING & BOTTOMLEY CO., of Bridgeport, Conn., has been awarded the general contract for an addition to the plant of the Salts Textile Co. The building will be one story high, of brick, 88 × 210 ft. SCHWARZ BROS., of this city, have the sub-contract for the carpenter work.

STAMFORD, CONN.—Plans are being prepared for a foundry building at the plant of the Yale & Towne Mfg. Co. It will be a 1-story structure, of brick and steel, and will cost about $25,000.

BUFFALO, N. Y.—The Otto Higel Co., Ltd., of Toronto. Ont., will build a plant in Buffalo for the manufacture of player-pianos.

DUNKIRK, N. Y.—The American Locomotive Co. will add to its Brooks Plant here a wheel shop, 120 ft. long and will rebuild the old boiler-shop for use of the machine shop department. The rebuilt shop is to be 400 × 90 ft.

HERKIMER, N. Y.—The Royal Gem Mill Co. will build a 4-story addition, 40 × 50 ft. to its knitting mill, from plans of C. Haug, arch., of Little Falls.

✚NIAGARA FALLS, N. Y.—The Spisella Co., manufacturers of corsets, formerly of Meadville, Pa., will build an extensive plant on a 4-acre site on Whirlpool St. to cost about $500,000. Contract for the initial group of buildings, main building and two wings each, 50 × 300 ft. Two stories of brick and steel has been let to the WESTINGHOUSE, CHURCH, KERR & CO., 10 Bridge St., New York. Cost, $200,000.

✚OGDENSBURG, N. Y.—The Floss Shade Roller Co., Charles F. Floss, Pres., has let contract to GEORGE E. CARD, of Watertown, for a 3-story factory to replace the building destroyed by fire.

✚ORISKANY FALLS, N. Y.—The J. F. HUGHES CONSTRUCTION CO., Utica, N. Y., has the contract for the erection of a 3-story and basement addition to the knitting mill, 50 × 192 ft., to be erected here by Hathaway & Reynolds.

OSWEGO, N. Y.—James A. Shufelt has had plans prepared for a 3-story brick knitting factory, 60 × 60 ft., with a separate power-house. It will be situated at Syracuse and Fourth Sts.

UTICA, N. Y.—According to reports, plans are under way for a reorganization of the Genesee Underwear Co., Liberty St., Utica. It is understood that it will be succeeded by the Lincoln Knitting Co., to be incorporated soon with a capitalization of $150,000. It is proposed to enlarge the plant so as to give employment to 200 operatives. J. DeP. Lynch is planning the reorganization.

BUFFALO, N. Y.—The Augustine Automatic Rotary Engine Co. is to build a $25,000 addition to its plant at 1826-1880 Elmwood Ave.

GARWOOD, N. J.—The National Boiler Co., recently incorporated, with a capital stock of $150,000, has secured a site along the Central Railroad and will start a factory this spring. The incorporators of the new concern are: V. L. Lockwood and Robert L. Redfield.

✚NEWARK, N. J.—Official advices are to the effect that the contract to erect a factory at Duryee St. and Sussex Ave. for the Lauter Co., piano manufacturers, has been awarded to the AMERICAN CONCRETE STEEL CO., 718 Union Block, Newark, at $60,000. Charles E. Cameron is Pres.

✚DUNNS STATION, PA.—A gasoline refining plant will be erected on the old Tim Ross farm now owned by Thomas Hoge, located southeast of this place over the Greene County line, by Spang & Co., of Butler. A contract has been let to W. E. CURRY for the concrete foundation, which will be 19 × 36 ft., and work will be commenced immediately.

FRANKFORD (Philadelphia post-office), PA.—Stearns & Castor are preparing plans for a 2-story factory building, 49 × 178 ft., for Gordon Bros., at Pierce and Orthodox Sts., Frankford.

HAMBURG, PA.—The Acme Broom Works contemplates erecting a plant here.

A 3-story building for factory and storage purposes is to be established in this city by the Hamburg Broom Works.

✚PHILADELPHIA, PA.—G. F. PAWLING & CO. have the contract for the erection of a 3-story factory, 37 × 70 ft., with an addition, 71 × 108 ft., at 414-16 North Third St. for Alexander Bros., to cost $55,000.

Stuckert & Sloan are preparing plans for a 6-story manufacturing building, 88 × 123 ft., at 606 to 616 Cherry St., for J. E. Edwards & Co. The cost will be $100,000.

✚MARCUS HOOK, PA.—Ballinger & Perrot, 1211 Arch St., Philadelphia, have awarded a contract to WILLIAM PROVOST, JR., of Chester, for two additional buildings for the plant of the American Viscose Co. at Marcus Hook.

PHILADELPHIA, PA.—The Acme Tea Co. will erect a $150,000 baking plant at the northeast corner of 25th and York Sts. The plant measures 160 × 225 ft.

BALTIMORE, MD.—The Boston Iron & Metal Co., 305 North Holliday St., has purchased about an acre of land at Highlandtown as a site for the erection of a plant and for storage. It will erect a wooden-frame building, 80 × 150 ft., and install cutting shears for structural steel. The building and machinery will cost about $20,000.

RICHMOND, VA.—The Kline Motor Car Co. has been chartered with $500,000 capital stock, and will establish a $150,000 plant with an annual output of 2,500 motor cars of various types. It will erect a 60 × 400-ft. building. S. E. Bailey, of Philadelphia, Pa., is Pres.; Samuel W. Meek, of Richmond, Vice-Pres.; D. R. Midyette, of Richmond, Secy.; James A. Kline, of York, Pa., Engr and Gen. Mgr.

RICHMOND, VA.—The R. A. Patterson Tobacco Co., it is stated, has nearly completed plans for its proposed plant to be built in the West End in the vicinity of the Richmond league baseball park. Recently the company purchased several acres of vacant property on Lombardy St., north of Broad, from the Richmond, Fredericksburg & Potomac Railroad, and on this site, together with several additional acres occupied by old warehouses formerly used by the Continental Tobacco Co., the extensive plant of the Patterson firm will be erected. The property purchased from the R. F. & P. fronts 400 ft. on Lombardy St. with a depth of 350 ft. The warehouse property runs 800 ft. along Bowe St. It may be stated that the plans of the tobacco company involve an expenditure of $1,000,000 and that actual building operations are expected to begin within a few weeks.

✚DURHAM, N. C.—The Durham Hosiery Mills has awarded contract to N. UNDERWOOD, of Durham, for erecting the company's additional building. This building will be three stories high, 113 × 135 ft., and cost about $25,000. It will be used for office, storage and finishing departments.

MOUNT HOLLY, N. C.—The Energetic Cotton Mills Co., of Mount Holly, has been organized with a capital stock of $100,000 for the purpose of building a plant to be equipped for manufacturing yarns, and later

to be enlarged with equipment for manufacturing collars and cuffs. This enterprise is the promotion of George A. Howell, of Charlotte, N. C. He has plans and specifications for the Energetic mill building, which will be a 1-story structure with cement floor, 300 × 71 ft. The initial equipment of machinery will be 5,000 spindles and accompanying apparatus for the production of Nos. 70 to 120 cotton yarns.

LANDO, S. C.—The Manetta Mills Co., of Lando, will build an addition and has selected plans and specifications for the structure. This will be 80 × 50 ft., two stories high, of brick construction. The company is a $300,000 enterprise and employs 600 operatives.

MOULTRIE, GA.—A company is being organized by G. F. Taylor, R. J. Corbett, W. C. Vereen and others for the purpose of constructing and operating a fertilizer plant and cottonseed-oil mill. The capital stock will be $75,000.

ROME, GA.—It is reported that the plant of the Acme Timber & Mfg. Co., recently destroyed by fire, will be rebuilt. Machinery to be installed will cost about $10,000.

SILURIA, ALA.—The Buck Creek Cotton Mills Co., of Siluria, has been formed with $600,000 capital stock as a reorganization of the Siluria Cotton Mills Co., which was capitalized at $250,000. T. C. Thompson, of Birmingham, is Pres. of new organization.

MEMPHIS, TENN.—A movement is on foot for the organization of a company to build a cotton mill at Memphis. A capitalization of $250,000 is contemplated and action has begun towards effecting the location of the enterprise. Leading business men are interested and will endeavor to secure the needed capital. South Carolina cotton manufacturers are interested in the plan and are negotiating with the Memphis promoters. The latter are headed by J. H. Erwin and C. C. Hanson, with offices in the Tennessee Trust Bldg.

BELLEVUE, O.—The Jeschke Manufacturing Co. has, it is reported, purchased seven acres of land in the vicinity of the Lake Shore and Nickel Plate railroads, and plans to construct a factory on the site.

CINCINNATI, O.—According to reports, Swift & Co., of Chicago, will spend over $100,000 in the erection of a cold storage plant at the southwest corner of Front and Walnut Sts., where ground has just been acquired.

✚CLEVELAND, O.—The Standard Oil Co. is to spend $60,000 in two factory buildings at the corner of Broadway and East 33d St. About 400 workmen will be employed making cans in which Standard Oil products are shipped. Each building will be 73 × 302 ft. in size, two stories high, of reinforced concrete construction. The CROWELL & SHERMAN CO. has the contract for the work.

FREMONT, O.—A plant is contemplated by the Christy Co. on Bidmell Ave. It will be of reinforced concrete construction and when completed there will be about 17,000 ft. of floor space. R. J. Christy is Pres.

✚NEW BREMEN, O.—The New Bremen Bridge Co. is the owner of the plant to be erected here. Details were given last week under this city.

NORWALK, O.—Edward Kerber, former Pres. of the Inter-State Ice Co., of Sandusky, is planning to erect an artificial ice plant at Norwalk.

WESTERVILLE, O.—A new company for the manufacture of silver polish has been organized in Westerville, and will expend several thousand dollars in fitting up a plant for the manufacture of the product on a large scale. It is known as the Williams Manufacturing Co. and H. E. Williams is Pres. and Gen. Mgr.

CLEVELAND, OHIO.—The Otis Lithographing Co., Caxton Bldg., has purchased a tract of land 700 ft. north of Euclid Ave. on the east side of East 30th St., and will proceed at once with the erection of a modern plant. The property has a frontage of 441 ft. and is 140 ft. deep. A 1-story building of fireproof construction will cover most of the site. For the present a structure 303 ft. long and 126 ft. deep will be erected. Albert Skeel, Arch., has completed plans for the structure and will ask for bids soon. The structure will be of steel, brick and concrete construction throughout and will be ready for occupancy by Aug. 1. William Brewer is Mgr.

✚SPRINGFIELD, OHIO.—After increasing its capital stock from $40,000 to $100,000 recently, the Directors of the Springfield Pure Milk Co. let the contract for its proposed plant on North Fountain Ave. to the STRUCTURAL CONCRETE CO., of Dayton.

ANDERSON, IND.—The Consolidated Automobile Co. has incorporated with a capital of $50,000. The company proposes to build, equip and operate an automobile factory. Henry Nyberg is Pres.

DECATUR, IND.—The Waring Glove Co. has had plans prepared for a glove factory to be constructed at Monroe and First Sts., on a plot 132 ft. square. The structure will be 48 × 132 ft., two stories and a basement. The contract will soon be awarded, it is stated.

EVANSVILLE, IND.—The Wolflin-Luhring Lumber Co. contemplates erecting a planing mill in connection with the present lumber mill.

A bakery is to be established here by Fred Hartman at an estimated cost of $30,000.

The Von Behren Mfg. Co., of this city, manufacturers of spokes and hubs, will build an addition, 40 × 60 ft.

MUNCIE, IND.—The W. R. Manufacturing Co. has been incorporated to establish and equip a factory to manufacture engines and safety devices. Michael Meehan is Pres. and C. A. Eby, Secy.

BUCHANAN, MICH.—The Buchanan Electric Steel Co. has purchased from Bainton Bros. a 6-acre tract of land known as the Buchanan Baseball Park, on which a plant, which with the equipment is to cost about $75,000, will be erected. The finishing touches are now being put on the plans, and the work of excavating for the foundations will be commenced soon. The plant, which will manufacture steel castings by electric process, will employ about 40 skilled men at the outset, but will require 100 men to run full blast. The company is capitalized at $150,000.

CADILLAC, MICH.—The Cadillac Veneer Co. will construct a concrete factory addition to its plant, it is reported.

CHICAGO, ILL.—The Canners Can Co., 123 West 46th St., is considering the erection of a $200,000 factory building on the northwest corner of Western Ave. and 49th St.

MANITOWOC, WIS.—The Aluminum Goods Mfg. Co. has accepted plans for improvements to cost approximately $75,000, to include the following described work: Main building, 300 × 43.4 ft., three stories high, of concrete and steel construction, fireproof; power house, 60 × 40 ft., equipped to develop 500 HP.; service tower, 43.4 × 20 ft., four stories high, of solid brick; brick stack, 125 ft. high. George Vits, of Manitowoc, is Pres. Noted April 13.

MILWAUKEE, WIS.—Eugene R. Liebert, Arch., Colby-Abbot Bldg., will receive bids until May 1, for the construction of a machine shop for the National Machine Co., 660-662 Washington St., to be erected on National Ave. It will be of concrete and steel construction and will cost $15,000.

Herman J. Esser, Arch., is completing plans for a testing shop for the National Brake & Electric Co., Park pl., and Milwaukee River, to cost $12,500. It will be 60 × 120 ft., on story high, of brick and steel, with a saw-tooth roof.

H. P. Schnetzky & Son, Archs., 1320 Cedar St., Milwaukee, have been commissioned to prepare plans and specifications for a garage and service building for the Kisselkar Co., Frank J. Edwards, Mgr., to be erected on Seventh St., just south of Grand Ave. and cost approximately $45,000. It will be 50 × 150 ft., four stories high, of reinforced concrete and steel construction. A full complement of tools for equipping a modern repair and rebuilding shop will be needed. Contracts will be awarded about May 5.

RACINE, WIS.—The Racine Malleable & Wrought Iron Co. has purchased lots Nos. 1, 4 and 5, block 7, Lakeside, adjoining its present plant, to provide for extensions and additions contemplated for late this year or ear lynext year. No definite plans have been made as yet.

✚RHINELANDER, WIS.—The Rhinelander Paper Co. has awarded the contract for the construction of a $75,000 addition to its mills here to BEN HERMAN & SONS, Engineers and Contractors, of Antigo, Wis. The building will cost $125,000 with complete equipment, contracts for which are still to be awarded.

NEENAH, WIS.—Plans and specifications are about completed for the construction of a mill for the Lakeside Paper Co., and it is expected that the contract will be awarded in about a month. Noted on April 13.

DES MOINES, IOWA.—The Des Moines Bakery Co. has purchased a site on which a $100,000 bakery will be erected on the Great Western tracks, near North St. in East Des Moines.

BELLE PLAINE, IOWA.—The Reliance Brick & Tile Co. has been organized in this city, with a capital stock of $400,000 and will erect a plant as soon as possible. W. R. Law, of Waterloo, is Pres.

ST. JOSEPH, MO.—The Myers Pump & Manufacturing Co., recently reported incorporated with $60,000 capital stock, will establish plant to manufacture farm and irrigating pumps, gasoline engines, etc. The officers are David S. Hall, Pres.; Michael M. Garvy, Vice-Pres.; William M. Myers, Secy-Treas. and Mgr.

ST. LOUIS, MO.—The Morbro Realty Co. plans to erect a 6-story fireproof factory building on Locust St., between Channing and Theresa Aves. Estimated cost, $75,000.

FORT SMITH, ARK.—The Garden City Buggy Co. is considering the erection of a 2-story brick buggy factory, at a cost of $15,000.

AUSTIN, TEX.—W. B. Walker & Sons, who own a canning factory here, are arranging to install a meat-packing house and cold-storage plant. The proposed improvements will cost about $100,000.

COLMESNEIL, TEX.—The Tyler Turpentine Co., which has been organized with a capital of $10,000, will install a turpentine distilling plant near here. The incorporators are S. S. Day, W. H. Day and E. C. Ballintine.

EL PASO, TEX.—The Kohlberg Cigar Co. will erect a 4-story concrete factory building here. Trost & Trost are the Archs. Estimated cost, $25,000.

GREENVILLE, TEX.—The Missouri, Kansas & Texas Railroad Co. has adopted plans for shops to be erected here. A. M. Acheson, of Dallas, is Acting Ch. Engr.

HOUSTON, TEX.—About 30 acres of land, with a ship channel frontage of 1,000 ft., situated between the turning basin and Clinton, on the north side, was purchased recently by James D. Dawson, Pres. of the Fidelity Cotton Oil & Fertilizer Co., and will be used, it is learned, as a site for a manufacturing plant of that concern.

PORT ARANSAS, TEX.—R. P. Bracht will install a machine shop here. The building will be of concrete block construction.

SAN ANTONIO, TEX.—L. K. Laursen, of Memphis, Tenn., has purchased a site here for a furniture factory that he and his associates propose to erect.

A cracker factory is to be erected here by Fred W. Pittman, of New Orleans, to cost $200,000, it is stated.

The L. Frank Saddlery Co. contemplates enlarging its factory.

TULSA, OKLA.—The Tulsa Portland Cement Co., recently reported incorporated with $300,000 capital stock, will establish a 700-bbl. plant. L. F. Barnes, Robinson Hotel Block, C. F. Tingley, H. R. Crews, J. W. McCloud, and others are incorporators.

TRINIDAD, COLO.—The Pells Brewing & Ice Co., formerly of Boulder, will soon begin the erection of a brewery at the place. Estimated cost, $50,000.

KLAMATH FALLS, ORE.—Plans are now under way for the construction of a sawmill and box factory for Klamath Falls to be erected at once at Hanks on the shores of the upper Klamath Lake, 1½ miles north of this city, for the Pelican Bay Lumber Co.

LOS ANGELES, CAL.—The Star Drilling Machine Co., of Akron, Ohio, has bought eight acres in Los Angeles, where it will erect a factory for the manufacture of oil, gas and water well machinery. Cost, $150,000.

✚BRYMAN (Halleck post-office), CAL.—C. J. CHRISTY, of Oro Grande, has the contract for constructing a paint house and clay-washing refinery for the Cold Water Paint Co., at Bryman.

REDONDO BEACH, CAL.—The Redondo Beach Ice & Cold Storage Co. has been formed here for the purpose of constructing a 20-ton ice plant. F. Parker is Pres. and A. Siebert, Secy.

RICHMOND, CAL.—The San Pablo Ice & Cold Storage Co., formerly of Vallejo, has arranged for opening a plant for the manufacture of ice and the establishment of a cold-storage plant in this city. L. B. Fuller is Pres., and E. Fromme, Mgr.

SANTA ANA, CAL.—The Macomber Rotary Engine Co., now operating a plant on Aliso St., Los Angeles, plans to establish a factory here. The capital stock is $1,000,000. A site is being sought.

✚SELMA, CAL.—THOMAS DAY & SONS, Monadnock Bldg., San Francisco, have been awarded the contract for the erection of a 1-story concrete canning plant for Libby, McNeil & Libby. The building will be 104 × 400 ft.

## MISCELLANEOUS CONTRACTS.

*(*Denotes that this work is advertised in Engineering News.)*

U. S. RECLAMATION SERVICE.—All news concerning canal and irrigation projects, etc., will be found under Water Supply—Irrigation.

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*SCRAPER AND TEAM WORK.—New England.—If you are interested in approximately 60,000 cu. yds. of scraper and team work in New England communicate with "S. 17," Engineering News, New York.

*ROCK EXCAVATION.—Portland, Me.—Bids were received as follows on April 11 by Lt.-Col. W. C. Craighill, Corps Engrs., U. S. A., Portland, for rock excavation in the Kennebec River at South Gardiner, Me.: John J. Fitzpatrick & Sons, Plattsburg, N. Y., $23.85 per cu. yd.; Johnston & Virden, Lewes, Del., $20.50; Frank W. Carleton, Bath, Me., $24; Eastern Dredging Co., Boston, Mass., $26.80.

LOCOMOTIVE.—Portsmouth, N. H.—Bids will be received until 11 a. m., June 3, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for a locomotive for yard service at the navy yard here. Specifications are on file at the office of Engineering News, New York.

*STONE SETTING.—Keene, N. H.—The R. H. Howes Construction Co., 105 West 40th St., New York, desires to sublet the setting of about 7,000 cu. ft. of exterior granite for the U. S. post-office here.

SUPERSTRUCTURE OF BREAKWATER.—Boston, Mass.—Bids were received as follows on April 20 by Col. Frederic V. Abbot, Corps Engrs., U. S. A., Boston, for the construction of the superstructure of the breakwater at Sandy Bay, Cape Ann, Mass., price per ton of 2,000 lbs.: (a) capstones, including iron pins; (b) all other stones; (c) rubblestone of Class A in interior of superstructure and in substructure; (d) rubblestone of Class B in substructure and in apron: Holbrook, Cabot & Rollins, Boston, (a) $9.60, (b) $7.60, (c) $3.10, (d) $3.70; The BREAKWATER CO., Morris Bldg., Philadelphia, Pa., (a) $7.23, (b) $5.73, (c) $1.90, (d) $2.18 (awarded contract); Rockport Granite Co., Pigeon Hill Granite Co., (a) $8.63, (b) $5.80, (c) $1.93, (d) $2.37.

*DRY EXCAVATION.—Sandwich, Mass.—On the Cape Cod Canal, 1,000,000 cu. yds. of dry excavation are to let, suitable for light steam shovel plants, etc. The work will be let in sections. Apply to Furst-Clark Construction Co., Sandwich.

*DREDGING.—Boston, Mass.—Bids will be received until 2 p. m., May 5, by the Board of Harbor and Land Commissioners, State House, Boston, for dredging in the entrance channel and anchorage basin of the harbor of Cohasset. Frank W. Hodgston is Ch. Engr. For details, see advertisement in this issue.

SEAWALL, ETC.—Fort Adams (Newport post-office), R. I.—Bids will be received until 10 a. m., May 11, by Lieut. J. J. Thomas, Constr. Q. M., U. S. A., Fort Adams, for the construction of a seawall, excavating, filling, etc., at Fort Adams.

*DREDGING.—New London, Conn.—Bids will be received until 3 p. m., May 19, by Lt.-Col. Harry Taylor, Corps Engrs., U. S. A., New London, for dredging in Shaws Cove, New London Harbor.

DREDGING.—New London, Conn.—Bids will be received by Lt.-Col. Harry Taylor, Corps Engrs., U. S. A., New London, until 3 p. m., May 20, for dredging in Pawcatuck River, R. I., and Conn.

PLAYGROUND APPARATUS.—New York, N. Y.—Bids will be received by the Park Board., Dept. of Parks, until 3 p. m., May 4, for all labor and material required for completing the contract abandoned by Schoverling, Daly & Gales for furni... and erect... ing playground apparatus i... ous parks in the Boroughs of Manhatta... Richmond.

ROPE.—New York, N. Y.— ... will be received by the Park Board, ... of Parks, until 3 p. m., May 4, for ... hing and delivering rope for parks.

LUMBER.—New York, N. Y. ... ls will be received by the Park Board, ... of Parks, until 3 p. m., May 4, for ... hing and delivering lumber for the M... tan Museum of Art, Central Park.

BROKEN STONE.—New Yo... Y.—Bids were received by George C... , Pres. Boro. Richmond, on April 4, ... all the labor and materials re... rnishing for furnishing and delivering 8,000 t... broken stone and screenings in Stone ... No. 1, and 10,000 tons screenings in ... Stone District No. 2, and 10,000 tons a... screenings in Stone District No. 3, as fol... No. 1, Manhattan Trap Rock Co., 30... ch St., $12,400; No. 2, Clinton Point St... Co., 115 Broadway, $17,500; No. 3, same, ...

ROAD MATERIAL, SAND.—N... York, N. Y.—Bids will be received until 1... m., May 2, by Cyrus C. Miller, Pres. Boro. Bronx, for furnishing and delivering 30... gallons of bituminous road surfacing m... al, and 2,500 cu. yds. of paving sand.

DOCK.—Long Island City (L. I., N. Y.—Calvin Tomkins, Comr. of Dock... is prepared plans for the construction ... public dock to cost $25,000 at the foot of ... Ave., Long Island City. Henry W. Sh... Chn. Com. on Docks and Railroads of ... Business Men's Association of Long I... City is interested.

ELEVATED RAILWAY EXT...ION.—New York, N. Y.—See item under Electric Railways.

*REPAIRS TO WHARF.—Fort H. G. Wright (New London post-office, Conn.), N. Y.—Bids will be received until ... a. m. May 16, by Capt. F. T. Arnold, Const. Q. M., U. S. A., New London, for repairs to timber wharf at Fort H. G. Wright.

*ASSESSMENT MAP.—Ossining, ... Y.—Bids will be received until 8 p. m., May 2, by Richard A. Ward, Village Clk., for making a village assessment map of the village of Ossining, according to specifications on file with the Village Clerk.

*WHEEL SCRAPER WORK.—Stillwater, N. Y.—The Central Dredging Co., of Schuylerville, N. Y., has about 10,000 cu. yds. of good wheel scraper work to sublet at Stillwater.

WATERWAY.—Trenton, N. J.—The State Assembly has passed the bill appropriating $150,000 for an inland waterway between Barnegat Bay and Manasquan Inlet in connection with the proposed State Canal. Noted on Jan. 26 and April 13.

STEEL SHED.—Elizabeth, N. J.—Bids were opened as follows on April 17 by the city for the construction of a steel shed: M. Byrnes Building Co., Elizabeth, $12,612; Cement Paving Co., Newark, N. J., $14,620; Snare & Triest, New York, $14,300; Goeller Iron Works, Newark, $14,039; H. A. Sapin, Elizabeth, $13,275. W. H. Luster is City Surv.

✚DREDGING. — Philadelphia, Pa. — The AMERICAN DREDGING CO. was awarded a contract by the Dock Department on April 21 to remove approximately 40,000 cu. yds. from in front of Cramps' Shipyard, so as to provide a safe channel for the launching on May 10 of the battleship Wyoming. This company was the only bidder, and agreed to do the work for 23½ cts. a cu. yd., with a proviso that a reduction of 3 cts. a cu. yd. in the contract price will be made should the city be willing to rehandle the dredged material in its plant at the House of Correction wharves.

STATION.—Philadelphia, Pa.—The Philadelphia & Reading Ry. Co. on April 20 filed plans with the Bureau of Buildings for a station at Ninth and Spring Garden Sts. on the recently completed "L" road on Ninth St. The plans provide for waiting rooms for men and women on both sides of the track, measuring about 15 ft. × 40 ft. Estimated cost, about $10,000.

DREDGING.—Wilmington, Del.—Bids will be received by Maj. R. R. Raymond, Corps Engrs., U. S. A., until May 15 for dredging in Appaquinimink River.

DREDGING.—Wilmington, Del—Bids will be received until 11 a. m., May 18, by Maj. R. R. Raymond, Corps Engrs., U. S. A., Wilmington, for dredging in Cohansey River, N. J.

*DREDGING.—Wilmington, Del.—Bids will be received until 11 a. m., May 22, by Maj. R. R. Raymond, Corps Engrs., U. S. A., Wilmington, for dredging Leipsic River, Del.

PARK.—Hagerstown, Md.—No steps have been taken toward the construction of a park here, for which $50,000 of bonds were voted on March 27. It will probably be a year before any action is decided upon. Noted on April 13.

ICE MACHINERY, ETC.—Washington, D. C.—Bids will be received until 11 a. m., May 6, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for ice-making and refrigerating machinery at the U. S. Marine Corps Rifle Range here. Specifications are on file at the office of Engineering News, New York.

FANHOUSE.—Baltimore, Md.—The Philadelphia, Baltimore & Washington R. R. Co., E. F. Brooks, Gen. Supt., Wilmington, Del., will erect a fanhouse in connection w... its tunnel on Pennsylvania Ave., between ... ewell and Pitcher Sts. The structure w... be of brick and stone, reinforced-concrete ... undation, slag roof, and will be equipped with suction fans. Construction work, exclu... e of equipment, will cost about $12,000.

TUGBOAT.—Washington, D. C.—Bids were received as follows on April 17 by Lt.-C... W. C. Langfitt, Corps Engrs., U. S. A., f... the construction of the steel screw t... boat "Colonel Leach": (a) tug complete, ... alternate bid for the tug complete in a... rdance with specifications, except that the ... tes

and angles in the feed-water tank forward of the boiler space under the coal bunker flats and immediately under the boiler shall be American ingot iron; (c) alternate bid 2, for the tug complete, except that an independent surface condenser mounted over a combined air and circulating pump, Wheeler or equal, a Riley multi-coil feed heater or equal, an independent feed pump and an auxiliary feed pump, Warren or equal, shall be installed instead of the condenser, heater, feed, and circulating pump specified: Fore River Shipbuilding Co., Quincy, Mass., (a) $64,800, (b) $65,000, (c) $64,000; Skinner Shipbuilding & Dry Dock Co., Baltimore, Md., (a) $47,000, (b) $49,000, using Skinner engine and boiler, $45,000; Spedden Shipbuilding Co., Baltimore, Md., (a) $53,767, alternate (c) $53,767; Maryland Steel Co., Sparrows Point, Md., (a) $54,700, alternate (c) $56,200; Pusey & Jones Co., Wilmington, Del., (a) $55,500, $55,750.

SUBMARINE CABLE.—Washington, D. C.—Bids were received as follows on April 14 by the Chief Signal Officer, U. S. A., for (a) 2,000 ft. of insulated lead-covered submarine cable, type 321, and (b) 5,000 ft. of same, type 326: National Electrical Supply Co., Washington, D. C., (a) 45 cts., (b) 78 cts.; Western Electric Co., 463 West St., New York, (a) delivery New York, 22.6 cts., delivery Hawthorne, 21.3 cts.; (b) delivery New York, 737.9 cts.; delivery Hawthorne, 35.8 cts.; Waterbury Co., 80 South St., New York, (a) 21.1 cts., (b) 35.1 cts.; Standard Underground Cable Co., Pittsburg, Pa., (a) 23.4 cts., (b) 40.9 cts.

COLLIERS AND TUGS.—Washington, D. C.—Bids will be received until noon, June 20, by the Navy Dept., for constructing four colliers, Nos. 9, 10, 11 and 12, and two seagoing tugs.

*JETTIES, ETC.—Washington, D. C.—Bids will be received until noon, May 20, by Lt.-Col. W. C. Langfitt, Corps Engrs., U. S. A., 920 17th St., N. W., Washington, for constructing and revetting jetties and driving marking piles in James River, Va.

DREDGING.—Alexandria, Va.—Bids will be received until noon, May 15, by Lt.-Col. W. C. Langfitt, Corps Engrs., U. S. A., Washington, D. C., for dredging in the Potomac River at Alexandria.

PUMPING EQUIPMENT.—Norfolk, Va.—Bids will be received until 11 a. m., May 27, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for dry dock pumping equipment at the navy yard, Norfolk. Specifications are on file at the office of Engineering News, New York.

ROOF COVERINGS.—Norfolk, Va.—Bids will be received until 11 a. m., May 20, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for roof coverings for Buildings Nos. 1, 19, 51, 61, 62 and 72 at the Navy Yard, Norfolk. R. C. Hollyday is Ch. of Bureau.

DREDGING.—Statesville, N. C.—Contract was not awarded on April 15 by the Drainage Commissioners, Statesville, for dredging Third Creek Drainage District. New bids will be received. The ditch will be 14.7 miles long, requiring the excavation of 437,240 cu. yds. of earth.

*DRAINAGE.—Swanquarter, N. C.—The time for receiving bids for the excavation of 83 miles of drainage canals and the erection of a pumping plant has been extended from May 4 to May 16. Bids will be recceived for this work by the Board of Drainage Commissioners of Mattamuskeet Drainage District No. 1, at Swanquarter. Plans and specifications are on file at the office of Engineering News, New York.

STEEL, BRASS, ETC.—Augusta, Ga.—Bids will be received until 2 p. m., May 18, by the Commanding Officer, Augusta Arsenal, Augusta, for furnishing during the fiscal year ending June 30, 1912, steel, brass, etc.

*DREDGING.—Jacksonville, Fla.—Bids will be received until noon, May 22, by Capt. George R. Spalding, Corps Engrs., U. S. A., for dredging in Caloosahatchee River and entrance, Florida.

*DREDGING, ETC. — Jacksonville, Fla.—Bids will be received until noon, May 25, by Capt. George R. Spalding, Corps Engrs., U. S. A., Jacksonville, for dredging and constructing shore revetment in St. Johns River, Fla.

EARTH WORK.—Vicksburg, Miss.—Bids will be received until 11 a. m., April 28, by Capt. A. J. Woodruff, Corps Engrs., U. S. A., Vicksburg, for about 65,000 cu. yds. of earth work in the Lower Yazoo Levee District.

*✚STRUCTURAL METAL. — Vicksburg, Miss.—Bids were received as follows on April 14 by Capt. Clarke S. Smith, Corps Engrs., U. S. A., Vicksburg, for about 307,000 lbs. of structural metal for use at Locks and Dams Nos. 4 and 8, Ouachita River, Ark. and La.: PENN BRIDGE CO., Beaver Falls, Pa., $19,752 (awarded contract); Whitehead & Kales Iron Works, Beecher Ave. and Michigan Central R. R., Detroit, Mich., $25,337; Charles Hegewald Co., New Albany, Ind., $18,741; Independent Bridge Co., Beaver Ave. and Rebecca St., North Side, Pittsburg, Pa., $23,634.

TOWBOAT.—Vicksburg, Miss.—Bids will be received until noon, June 6, by Capt. J. A. Woodruff, Corps Engrs., U. S. A., for furnishing and delivering one steel-hull towboat.

ROCK.—New Orleans, La.—Bids were opened on April 16 by Maj. H. Burgess, Corps Engrs., U. S. A., for 60,000 tons of rock for bank revetment in the Mississippi River. Guy Dickinson, Little Rock, Ark., has been recommended for award at $2 per ton.

*ROCK EXCAVATION.—Nashville, Tenn.—Bids will be received by Maj. William W. Harts, Corps Engrs., U. S. A., Nashville, until 11 a. m., May 22, for rock excavation at Tuscumbia Bar, near Sheffield, Ala.

✚*LOCK AND DAM.—Cincinnati, Ohio.—The contract has been awarded to BATES & ROGERS CONSTRUCTION CO., Old Colony Bldg., Chicago, Ill., for constructing Lock and Dam No. 29, Ohio River, near Ashland, Ky. Noted on April 6.

CULVERT PIPE.—Mount Gilead, Ohio.—The Commissioners of Morrow County, Mount Gilead, will receive bids until 11 a. m., May 19, for iron culvert pipe from 8 to 48-in. diameter. Clifton Sipe is County Audr.

COMFORT STATIONS, ETC.—Youngstown, Ohio.—Bids will be received by the Board of Park Commissioners until noon, May 1, for furnishing the necessary labor and material for the erection of comfort stations and refreshment stands to be located at Lincoln and South Side Parks. Lionel Evans is Supt.

*DAM WORK.—Cincinnati, Ohio.—Bids were received as follows on April 20 by Maj. John C. Oakes, Corps Engrs., U. S. A., Cincinnati, for reconstructing in concrete the top of Dam No. 5, Muskingum River: S. George Campbell, Parkersburg, W. Va., $39,028; Clifton Bros., Zanesville, Ohio, $33,-109; J. A. Swingle & Co., Zanesville, $31,-162; Bates & Rogers Construction Co., Chicago, Ill., $48,799.

*LOCK AND DAM.—Cincinnati, Ohio.—Bids will be received until noon, May 26, by Maj. John C. Oakes, Corps Engrs., U. S. A., Cincinnati, for constructing Lock and Dam No. 14, Kentucky River, at Heidelberg.

EXPLOSIVES.—Chicago, Ill.—See item under Water Supply—Irrigation.

DITCH.—Honey Point, Ill.—Bids will be received until 10 a. m., May 2, by the Drainage Commissioners of District No. 5, Honey Point, Macoupin County, for constructing an open ditch requiring 2,400 cu. yds. of excavation and tile drains requiring 25,353 ft. of 6 to 24-in. tile. The Morse-Warren Engineering Co. is Engr., Carlinville, Ill.

COALING STATION.—Mattoon, Ill.—The Cleveland, Cincinnati, Chicago & St. Louis Ry. Co., has awarded a contract to the ROBERTS & SCHAFER CO., of Chicago, for an 800-ton coaling station at Mattoon with steel substructure and wood pockets. Approximate cost, $20,000.

*EXCAVATION, ETC.—Chicago, Ill.—Bids will be received until noon, May 18, by I. J. Bryan, Clk., Sanitary District of Chicago, American Trust Bldg., Chicago, for excavation and collateral work on Contract Section 3 of the Calumet Sag Channel. The approximate quantities for the comparison of bids are: 325,000 cu. yds. of glacial drift, 197,000 cu. yds. of rock excavation, 83,500 sq. ft. of channeling, 7,500 cu. yds. of concrete retaining wall, 114,000 sq. yds. of riprap slopes. Plans and specifications may be obtained upon application at the office of the District.

✚DRAINAGE WORK.—Marshall, Wis.—Bids were received on April 15 by the Commissioners of Shepherd Drainage District, Marshall, for drainage work in the district. The contract has been awarded to KOCH & SCHULTZ, of South Milwaukee, Wis., at 7.6 cts. per cu. yd. for main ditch and $3 per rod for laterals. W. H. Tasker is Comr.

*DREDGING.—Milwaukee, Wis.—Bids will be received until noon, May 24, by Lt.-Col. George A. Zinn, Corps Engrs., U. S. A., for dredging at Oconto Harbor, Wis.

✚DITCH.—Algona, Iowa.—The contract has been awarded to the NORTHWESTERN DRAINAGE & CONSTRUCTION CO., of Bancroft, Iowa, for the construction of ditch No. 51, about 59,700 ft. of 6-in. to 16-in. tile, at $14,400. Bids were opened on April 6 by B. E. Norwood, County Audr.

*DREDGING.—Duluth, Minn.—Bids were received as follows on April 15 by Maj. Francis R. Shunk, Corps Engrs., U. S. A., Duluth, for dredging in Ashland Harbor, Wis.: Edward Bros. Dredge Co., Sault Ste. Marie, Mich., $76,470; Great Lakes Dredge & Dock Co., Chicago, Ill., $52,110 (recommended for award); Zenith Dredge Co., Duluth, $54,687; Northern Dredge & Dock Co., Duluth, $67,980; Duluth Marine Contracting Co., Duluth, $61,680; Duluth-Superior Dredging Co., Duluth, $63,885.

✚DITCH.—Alexandria, Minn.—The Boards of Commissioners of Douglas and Todd Counties have awarded a contract to PETER CHRISTENSEN, of Osakis, Minn., for digging and constructing sections 1 to 55 of branch No. 4, Judicial Ditch No. 2 in the two counties.

DRAINAGE CANAL, ETC.—Carrollton, Mo.—Bids will be received at public outcry on May 15 for the construction of the main canal and laterals of Drainage District No. 3, about 21 miles long, requiring 1,170,000 cu. yds. of excavation. Brooks & Jacoby, 515 Shukert Bldg., Kansas City, Mo., are Engrs.

LEVEE.—Kansas City, Mo.—Plans for the construction of a levee to protect the entire river front of Kansas City as well as the Blue Valley were submitted to the Board of Public Improvements on April 15 by S. Waters Fox, Consult. Engr. The plans provide for the creation of two levee improvement districts, one to extend from Broadway to the state line and the necessary addition to the present levee district east of Broadway to extend from the mouth of the Blue River to the proposed Blue Valley Levee.

DRAINAGE DISTRICT.—Galveston, Tex.—The creation of anothed drainage district in Galveston County is under consideration by the Board of County Commissioners. An election will probably be held some time in May to vote on the proposition of issuing bonds for the purpose. Dredging and ditch machinery will be required to carry out the work if the proposition is favorably acted upon.

TUNNEL.—Denver, Colo.—The Allen Tunnel Bill was passed by the House on April 7 and sent to the State Senate. This bill provides for a $4,000,000 state bond issue to bore a railroad tunnel through the main range of the Rocky Mountains.

COTTAGES.—McDowell, Ariz.—Bids will be received until 2 p. m., May 26, by R. G. Valentine, Comr. of Indian Affairs, Dept. of the Interior, Washington, D. C., for all materials and labor for the construction of three cottages at Salt River, Camp McDowell Agency, Ariz. Charles E. Coe is Supt., McDowell.

STONE.—Seattle, Wash.—Bids were received on April 7 by Maj. C. W. Kutz, Corps Engrs., U. S. A., for 375,000 tons of stone. The lowest bid submitted was that of the Hevenles Sandstone Co., at $1.78 per ton.

✚PIPE.—Chico, Cal.—Bids have been received by the city for about 600 ft. of No. 1 steel or iron pipe, 8 and 10-in. diameter. The contract has been awarded to L. L. HUBBELL, of Chico.

STEEL AND RIVETS.—Los Angeles, Cal.—The Board of Public Works will receive bids until 2 p. m., May 26, for furnishing all fabricated steel and rivets necessary to construct 1,865.02 ft. of riveted steel, 9 ft. 3 ins. in diameter; 5,163.74 ft. of riveted steel siphon 10 ft. in diameter, and 8,313.14 ft. of riveted steel 11 ins. in diameter. Horace B. Ferris is Secy.

✚LEVEE.—San Francisco, Cal.—Haviland & Tibbetts, Consult. Engrs., Alaska Commercial Bldg., San Francisco, have awarded the contract for constructing an earth levee, about 1,500,000 cu. yds., in Yolo County, for the West Sacramento Co., to the VULCAN DREDGING CO., 231 First St., San Francisco. Noted on April 6.

DRYDOCK.—Montreal, Que.—The Canadian Government and the Harbor Commissioners of Montreal have awarded a contract to VICKERS' SONS & MAXIM, of England, for a floating drydock here. The contract provides for the construction and operation of a floating drydock with a lifting capacity of 27,000 tons, the establishment of a shiprepairing plant and a mill for the production of steel railway ties, in consideration of receiving a subsidy of 3% interest on $3,000,000 for 30 years. The dock is to be completed by May, 1912.

✚STORAGE AND SHIPPING ELEVATOR.—Montreal, Que.—The Grand Trunk Ry. Co. has awarded a contract to the JOHN S. METCALF CO., LTD., 10 St. John St., Montreal, for a reinforced-concrete storage and shipping elevator of 500,000 bushels capacity to be built at Windmill Point, Montreal. This elevator will be connected with the present 1,100,000 bushel steel elevator built by the same company a few years ago at that point. The elevator will be operated by the Montreal Warehousing Co., as is the present one. Approximate cost of new work, $125,000.

WHARF.—Ottawa, Ont.—Bids will be received until 4 p. m., May 9, by R. C. Desrochers, Secy. Dept. of Pub. Wks., Ottawa, for the construction of a wharf at Trynor's Cove, Charlotte County, N. S.

DREDGING.—Cornwall, Ont.—Bids will be received until May 5 by L. K. Jones, Secy., Dept. Railways and Canals, Ottawa, Ont., for dredging Rapide Plat Canal, Cornwall. Plans and specifications can be seen at the office of the Department or at the office of the Resident Engineer, Ontario-St. Lawrence Canals, Cornwall.

*DOCK.—Toronto, Ont.—Bids will be received until noon, May 23, by the Board of Control, G. R. Geary, Chn., for construction of a dock in Ashbridge bay. Specifications and form of proposal may be obtained from the Department of Railways, Bridges and Docks, City Engineer's office. C. H. Rust is City Engr.

*HARBOR WORK.—Chile.—See item under Foreign Contracts.

## CONTRACT PRICES.

*(*Denotes that this work is advertised in Engineering News.)*

✚*SANITARY SEWERS.—Freeport, Ill.—Bids were received by the Board of Local Improvements for the construction of the West and East Freeport sanitary sewer systems from (A) J. W. TURNER IMPROVEMENT CO., Des Moines, Iowa (awarded contract for West Freeport system); (B) John Grogan, Green Bay, Wis.; (C) Gund, Graham Co., Freeport, Ill.; (D) Kenety & Lee, Dubuque, Iowa; (E) A. C. Schleiter, Monotowa, Wis.; (F) Key & McNamara, Dubuque, Iowa; (G) M. C. Camery, Harlan, Iowa; (H) H. E. KOUNISNKI, Watertown, Wis. (awarded contract for East Freeport system):

WEST FREEPORT SYSTEM.

| | A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|---|
| 22,359 ft. 8-in. pipe | $0.81 | $0.88 | $0.92½ | $0.92 | $0.95 | $0.98 | $0.98 |
| 2,303 ft. 10-in. pipe | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | .98 | .98 |
| 1,865 ft. 12-in. pipe | 1.25 | 1.20 | 1.15 | 1.20 | 1.25 | 1.15 | 1.25 |
| 1,560 cu. yds. rock excavation | 3.00 | 3.50 | 3.00 | 2.50 | 2.25 | 2.50 | 3.00 |
| 48 manholes | 50.00 | 36.00 | 35.00 | 50.00 | 45.00 | 40.00 | 45.00 |
| 22 lampholes | 7.00 | 7.00 | 5.00 | 8.00 | 5.00 | 7.50 | 7.50 |
| Total | $29,979 | $31,558 | $31,599 | $31,587 | $31,655 | $32,298 | $34,228 |

EAST FREEPORT SYSTEM.

| | H | A |
|---|---|---|
| 6,297 ft. 8-in. pipe | $0.95 | $0.75 |
| 2,379 ft. 10-in. pipe | 1.37 | 1.50 |
| 1,138 ft. 12-in. pipe | 1.43 | 2.50 |
| 21 manholes | 47.00 | 60.00 |
| 6 lampholes | 7.00 | 7.00 |
| Concrete vat for pumping station | 700.00 | ... |
| Frame pump house | 200.00 | ... |
| Two 10-HP. vertical motor pumps | 1,130.00 | 2,400* |
| 4 flush tanks | 85.00 | 90.00 |
| 200 cu. yds. concrete | 3.50 | 5.00 |
| Total | $14,967 | $16,198 |

DAM. — Cincinnati, Ohio. — Bids for reconstructing, in concrete, the top of Dam No. 5, Muskingum River, were received on April 20 by Major John C. Oakes, Corps Engrs. U. S. A., from: (A) C. George Campbell, Parkersburg, W. Va.; (B) Clifton Bros., Zanesville, Ohio; (C) J. A. Swingle & Co., Zanesville, Ohio; (D) Bates & Rogers Construction Co., Chicago, Ill. The item bids were:

| | A. | B. | C. | D. |
|---|---|---|---|---|
| 4,000 cu. yds. excavation | $1.50 | $0.90 | $0.60 | $3.25 |
| 4,691 cu. yds. concrete | 5.25 | 4.50 | 4.75 | 6.25 |
| 4,800 bbls. cement | 1.75 | 1.75 | 1.35 | 1.35 |
| **Totals** | **$39,027** | **$33,109** | **$31,162** | **$48,798** |

## U. S. POSSESSIONS.

*(✚Denotes a contract awarded.)*

STEEL FOUNDRY EQUIPMENT.—Panama.—Bids will be received until 10.30 a. m., May 8, by Capt. F. C. Boggs, Corps Engrs., U. S. A., Gen. Pur. Officer, Isthmian Canal Comn., Washington, D. C., for equipment for steel foundry, including converter, blower, sand crusher and mixer, ladles, ladle heaters and materials for making steel castings; cast-iron wheels for cross conveyor, manganese steel castings, steel castings, clutch fibers for rock crusher, ball governor, ejectors, rheostats, white oak lumber, etc.

DYNAMITE.—Panama.—Bids were received as follows on April 14 by Capt. F. C. Boggs, Corps Engrs., U. S. A., Gen. Purchasing Officer, Isthmian Canal Comn., Washington, D. C., for furnishing (a) 6,500,000 lbs. saltpeter dynamite, 45% nitro-glycerine; (b) 3,-300,000 lbs. salt-peter dynamite, 60% nitroglycerine, 1¼ × 8-in. cartridges; (c) 200,000 lbs. same, in 2 × 8-in. cartridges: Giant Powder Co., San Francisco, (a) 50% total quantity, 12.94 cts. per lb., (b) 50%, 14.69 cts., (c) 14.69 cts.; Keystone National Powder Co., Emporium, Pa., (a) 25% total quantity, 12.25 cts., (b) 50%, 13.65 cts., (c) 13.65 cts.; E. I. Dupont de Nemours Powder Co., Wilmington, Del., (a) 12.73 cts. per lb., (b) 13.82 cts., (c) 13.82 cts.; total or 75% or 50% or 25% of each will be accepted.

PILING.—Panama.—Bids were received as follows on April 22 by Capt. F. C. Boggs, Corps Engrs., U. S. A., Gen. Purchasing Officer, Isthmian Canal Comn., Washington, D. C., for furnishing (a) 500 creosoted piles, 85-ft. long, and (b) 2,000 uncreosoted piles, 85-ft. long: American Tie & Timber Co., New York, (a) $22,482, (b) $38,165, not on specifications; J. H. Burton & Co., 45 Broadway, New York, (a) $45.50 per pile, (b) $30.38 per pile, not on specifications; S. E. Naylor & Co., Gulfport, Miss., (b) $57,800; Robinson Lumber, Veneer & Box Co., Ltd., New Orleans, La., (b) on 1,500 piles, $54,-187; W. R. Grace & Co., San Francisco, Cal., (a) $32,566, (b) $72,250, on Douglas fir; Gulfport Creosoting Co., Gulfport, Miss., (a) $33,575. Bids on yellow pine unless otherwise specified.

## FOREIGN CONTRACTS.

*(* Denotes that this work is advertised in Engineering News.)*

(To insure prompt attention, letters on consular business should be addressed to The American Consul at ———, ———. Such letters are opened and attended to by whoever may be in charge of the office. If addressed to the consul, personally, letters are forwarded to him, unopened, should he be absent, and a delay thus intervenes.

If, in the meantime, he should have gone out of office, the matter may wholly escape attention.)

✚CANAL.—Cuba.—The contract for the Roque Canal in Matanzas Province has been awarded to CHAMPION & PASCUAL, of Havana, Cuba. Estimated cost, $1,500,000. T. T. Allard is Ch. Engr. for the contractors.

TELEGRAPH AND TELEPHONE MATERIAL, ETC.—Australia.—Bids will be received until May 23 by the Deputy Postmaster-General, Melbourne, for telegraph and telephone material; also until June 7 for 4,052 yds. of submarine telephone cable.

*HARBOR WORK.—Chile.—Bids for the construction of Valparaiso and San Antonio harbors will be received in the "Ministerio de Hacienda," in Santiago, Chile, at 3 p. m., July 22. Plans may be consulted and information obtained in the office of the Consulate General of Chile, 2 Rector St., Room 431, New York, from noon to 3 p. m. Noted on April 6.

ENGINES AND PUMPS.—India.—Bids will be received until 4 p. m., June 20, by the Chairman of the Municipality of Serampore, for the supply and installation of engines and pumps at the Hourah water-works pumping station at Serampore. The pumping machinery will be in duplicate, and one of the following types: (1) horizontal compound steam pumps with boilers complete; (2) suction gas engines driving three throw plunger pumps with suction gas plant complete, or (3) oil engines driving similar pumps.

# LIST OF CONTRACTS PENDING

## Plans and Specifications on File.

The following plans (P.) and Specifications (S.) are on file for reference only unless otherwise noted at the office of The Engineering News Publishing Co., 220 Broadway, New York

Bids close. — Noted in issue of

4-29 Boilers, etc., Hawaii.......(S.) 4- 6
4-29 Dredging, Boston, Mass......(S.) 4- 6
5- 6 Repairs to slips, Norfolk, Va. (S.) 4- 6
5- 6 Ice machinery, etc., Washington, D. C. .....................(S.) 4-27
5- 9*Interceptor, Toronto, Ont....(S.) 4-27
5-13 Elec. light machinery, Washington, D. C. ....................(S.) 4-27
5-16*Drainage canals, etc. Swanquarter, N. C................(P. & S.) 4-27
5-20 Roof coverings, Norfolk, Va..(S.) 4-27
5-27 Pumping equip., Norfolk, Va.(S.) 4-27
5-27 Wharf, trestle, etc., Alaska..(S.) 4-13
6- 1*Canal enlargement, Boise, Idaho. ......................... (S.) 3-30
6- 3 Floating cranes, Hawaii....(S.) 4- 6
6- 3 Locomotive, Portsmouth, N. H. ......................... (S.) 4-27

## Light, Heat and Power Plants.

4-28 Franchise, Susanville, Cal....... 4- 6
4-29 Boilers, etc, Hawaii (U. S. Poss.) 4- 6
5- 1 Lighting fixtures, Wash., D. C.... 4- 6
5- 1 Electrical supplies, Benicia, Cal. 4- 6
5- 1 Machinery, Yonkers, N. Y....... 4- 6
5- 1 Lighting standards, Winnipeg, Man. ....................... 3-23
5- 1 Heating and ventilating system, Lorain, Ohio. ................. 4-20
5- 1 Electric lighting system. Fort Bliss, Tex. .................. 4-27
5- 1 Ornamental lamp posts, Washington, D. C.................. 4-27
5- 1 Electrical work, Springfield, Mass. 4-27
5- 2 Steam engine, Boston, Mass..... 4-27
5- 3*Heating plant, Ft. Totten, N. Y... 4- 6
5- 4 Superstructure of power station, Jacksonville, Fla. ............. 4-27
5- 5 Engine and generators, Gallatin, Tenn. ....................... 4-27
5- 6 Power plant, etc., Avondale, O.. 4-13
5- 8 Conduits and wiring and lighting systems, Richmond, Va...... 4-13
5- 8 Power-house, Sykesville, Ind.... 4-27
5- 8 Electrical equip., New York, N. Y. 4-27
5- 9 Feed-water heater, Leavenworth, Kan. ........................ 4-27
5-10*Heating and ventilating apparatus, Richmond, Va ........... 4-13
5-10 Power dam, etc., Yorkville, Ill.... 4-20
5-10 Lock & dam, Woodlands, W. Va. 4-27
5-10 Electrical equip., Albany, N. Y.. 4-27
5-13 Elec. light machinery, Washington, D. C. ................... 4-27
5-13 Steam heating plant, Burlington, Ky. ......................... 4-27
5-15*Fuel and supplies, West Point, N. Y. ......................... 4-20
5-15 Power plant, Eagle Dam, Tex.... 4-27
5-15 Electrical equipments, Toledo, O. 4-27
5-24 Franchise, Riverside, Cal........ 4-27

## Bridges.

4-28*Bridge, Rutherford, N. J......... 4-13
4-28 Bridge, Topeka, Kan............. 4-20
4-28 Bridge, Chambersburg, Va........ 4-27
4-29 Viaduct, Cleveland, Ohio ........ 4-20
4-29 Bridge, etc., Cleveland, Ohio.... 4-13
4-29 Bridge, Barnstable, Mass......... 4-27
5- 1 Bridges, Richmond, Ind.......... 4-27
5- 1 Bridges, etc., Bradford, Pa....... 4-13
5- 1 Bridges, Muskogee, Okla.......... 4-13
5- 1 Bridges, Bloomfield, Ind......... 4-20
5- 2 Bridge work, Decatur, Ind....... 4-20
5- 3 Bridges, Sullivan, Ind........... 4-27
5- 3 Bridges, Princeton, Ind......... 4-27
5- 4 Bridge, Jersey City, N. J....... 4-27
5- 4 Bridges, Bluffton, Ind.......... 4-27
5- 4 Bridge work, Laporte, Ind....... 4-27
5- 8 Bridge, Shelbyville, Ind......... 4-20
5- 8 Bridges, Washington, Ind........ 4-27
5- 9 Bridges, Butler, Pa.............. 4-27
5-10 Bridge work, Newark, Ohio ....... 4-20
5-10 Bridges, Baltimore, Md........... 4-27
5-16 Bridges, Dauphin, Man........... 4-20
5-16 Substructure, Columbus, Ohio... 4-27
6- 1 Bridge work, New York, N. Y... 4- 27
6-17 Bridge, Spain ........(Foreign) 4- 6

## Buildings.

4-27 School, Logansville, Wis......... 4-27
4-28 Remodeling city hall, Hammond, Ind. ........................... 4-27
4-28 School, Boston, Mass............ 4-20
4-28 Grade school, Amanda, Ohio..... 4-13
4-28 School, Coldwater, Ohio......... 4-20
4-29 Court house, Prescott, Ark...... 4-13
4-29 Public library, Columbus, Ohio.. 4-20
4-29 School, Algoma, Wis............. 4-27
4-29 School, Montevideo, Minn........ 4-27
4-30 School, Summit N. J............. 3-30
5- 1 Plans, Vancouver, B. C. (Mfg. Pl.) 3-23
5- 1 School, Canonsburg, Pa.......... 4- 6
5- 1 Erection and remodeling of schools, London, Ohio........... 4-20
5- 1 School, Lorain, Ohio............ 4-20
5- 1 Postal sta. bldg., Montreal, Que. 4-20
5- 1 School, Fennimore, Wis......... 4-20
5- 1 Tuberculosis hospital, Akron, O.. 4-20
5- 1 Building, Seattle, Wash......... 4-20
5- 1 Dormitory, Corsicana, Tex...... 4-20
5- 1 Brick school, Rosetown, Sask.... 4-20
5- 1 Portable school house, New York. 4-20
5- 1 School, New York, N. Y......... 4-20
5- 1 Schools, Wellsburg, W. Va...... 4-27
5- 1 Brick school, Amherst, N. Dak.. 4-27
5- 1 Erection of addition to bank, Omaha, Neb. ................... 4-27
5- 1 Addition to university, Bloomington, Ind. .................... 4-27
5- 1 Machine shop, Milwaukee, Wis. (Mfg. Pl.) .................... 4-27
5- 1 Club house, Little Falls, N. Y... 4-27
5- 2 U. S. post-office, North Platte, Neb ........................ 4-13
5- 3 School, Gibson, Iowa ........... 4-13
5- 3 Concrete barracks, San Francisco, Cal.......................... 4-13
5- 3 City hall, Richland Center, Wis. 3-30
5- 3*Plumbing, Kings Park, N. Y.... 4-27
5- 4*County court-house, Auburn, Ind. 4- 6
5- 4 Machinery bldg., Des Moines, Ia. 4-20
5- 4 School, Niles, Ohio............. 4-20
5- 4 School, Berne, Ind.............. 4-27
5- 6 School, Pittsford, Vt........... 4-27
5- 6 School, Athens, Ohio........... 4-20
5- 6 School, Oak Harbor, Ohio....... 4-20
5- 8*Addition to hospital, Ft. Totten, N. Y. .......................... 4-20
5- 8 School, Boston, Mass............ 4-27
5- 8 Lodge, Tamaque, Pa............ 4-27
5- 9 Court house, Dillon, S. C........ 4-27
5- 9 Superstructure of dome, Madison, Wis. ........................ 4-27
5- 9 School, Belgrade, Minn. ......... 4-27
5- 9 Workshop, New York, N. Y..... 4-27
5- 9*U. S. post-office, Faribault, Minn. 4- 6
5-10 U. S. post-office, court house, etc., Richmond, Va............. 4-13
5-10 Buildings for hospital, Cincinnati, Ohio ......................... 4-13
5-10 Isolation hospital. Ft. Sam Houston, Tex. ...................... 4-20
5-10 Detention home, Sacramento, Cal. 4-27
5-10 Remodeling court house, Williamson, W. Va..................... 4-27
5-11 School house, Stockport, Iowa... 4-27
5-11 City hall, Oakland, Cal......... 4-27
5-11*U. S. post-office, Hope, Ark...... 4- 6
5-15 School, Pendleton, Ore.......... 4- 6
5-16 Extension and remodeling of court house, Charlestown, W. Va..... 4-13
5-17 School, Forest Hill, La.......... 4-13
5-17*U. S. post-office, Pana, Ill...... 4-13
5-18 U. S. post-office, Coffeyville, Kan. 4-16
5-19*U. S. post-office and court house, Phoenix, Ariz ................ 4-13
5-20 U. S. post-office, Sioux Falls, S. Dak ......................... 4-13
5-22 U. S. post-office, Warrensburg, Mo ........................... 4-13
5-23 U. S. post-office, Ft. Collins, Colo. 4-20
5-24 School, Waupaca, Wis........... 4-20
5-24*U. S. post-office, Greenwood, Miss. 4-20
5-25 U. S. post-office and custom-house, San Diego, Cal.......... 4-20
5-27 U. S. post-office, Gadsden, Ala.. 4-20
5-27*U. S. post office and custom house, Richford, Vt............ 4-20
5-29 U.S. post-office, Dyersburg, Tenn. 4-27
6- 5*U. S. post-office, Dublin, Ga.... 4-27

## Water-Works.

4-28 Wells, Guthrie, Okla............ 4-27
4-28 Water-works, Sapulpa, Okla..... 4-27
4-28 Reservoir, Toulon, Ill........... 4-20
4-29*Pumps, Sioux City, Iowa (See under Proposed Advertisements).
4-29 Water addition, Fort Dade, Fla.. 4-13
4-30 Pump, Regina, Sask............. 4-20
5- 1 Water-works, Romney, W. Va... 4-20
5- 1 Water meters, Sebastopol, Cal... 4-20
5- 1 Wells, etc., Sherman, Tex........ 4-13
5- 1*Water extension, Skillman, N. J. 4-13
5- 1*W-Wks. material, Penticton, B. C. - 6
5- 1 Water-wks., Madison Lake, Minn. 4-20
5- 1 Watermains, Kenmore, N. Dak.. 4-27
5- 1 Watermains, Whiting, Ind....... 4-27
5- 1 Boiler, Mankato, Minn......... 4-27
5- 1 Watermains, Yankton, S. Dak.. 4-27
5- 1 Well, Grafton, N. Dak......... 4-27
5- 1 Reservoir, etc., Springdale, Pa.. 4-27
5- 1 Water-wks., etc., Park City, Utah. 4-27
5- 2*W.-wks. impvt., Mansfield, Ohio. 4-27
5- 2*Water system, etc., Blauvelt, N.Y. 4-20
5- 3*Pumping engine, Rahway, N. J.. 4-13
5- 3*Watermain, Perth Amboy, N. J. 4-27
5- 3 Fire hydrants, New York........ 4-27
5- 4*Cast-iron pipe conduit, N. Y.... 4-20
5- 8 Water-works, Chappell, Neb..... 4-20
5- 8 Water-works equip., Sherman, Tex 4-13
5- 5 Explosives, etc., Chicago, Ill.... 4-27
5- 8 Well, etc., Chillicothe, Mo....... 4-27
5- 9 Dam, Lancaster, Pa............. 4-27
5- 9 Water tower, Lakewood, Ohio... 4-20
5-11*Water main, Geneva, N. Y....... 4-27
5-12 Water mains, Rockport, Ohio.... 4-20
5-12 Irrigation canals, Oakdale, Cal.. 4-27
5-12 Meters, Minneapolis, Minn...... 4-27
5-15*Well, Tipton, Iowa............. 4-27
5-15*Water-works, Penticton, B. C.... 4- 6
5-16*Tunnel, New York ............. 4-20
5-16*Pumps, etc., Norfolk, Va........ 4-27
5-17 Reservoir, etc., Fort Mason, Cal. 4-27
5-31 Pipe, Vancouver, B. C........... 4- 6
6- 1*Canal enlargement, Boise, Idaho. 3-30
6-20 Engines and pumps, India (Foreign) ......................... 4-27

## Sewers.

4-27 Sewer pipe castings, etc., Norristown, Pa. .....................
4-27 Sewers, Youngstown, Ohio...... 4-27
4-27 Sewers, Cleveland, Ohio......... 4-27
4-28 Sewers, Cincinnati, Ohio........ 4-27
4-28 Sewers, Sapulpa, Okla.......... 4-27
4-28 Sewers, Dedham, Mass. ........ 4-27
4-28 C.-i. gate valves, Boston, Mass... 4-27
4-28 Storm sewers, Geneva, Ohio..... 4-20
4-29 Sewers, Racine, Wis............ 4-20
4-29 Sewer, Appleton, Wis........... 4-27
5- 1 Sewer, Titusville, Pa............ 4-27
5- 1 Sewers, Boonville, Mo........... 4-27
5- 1 Sewers, West Lafayette, Ohio... 4-27
5- 1 Sewer and water system, Springdale, Pa. ....................... 4-27
5- 1 Sewer-pipe, Decatur, Ind........ 4-27
5- 1 Sewer, Yankton, S. Dak......... 4-27
5- 1*Sewers, Kokomo, Ind........... 4-20
5- 1 Sewer, Fremont, Ohio........... 4- 6
5- 1 Sewers, Lusk, Wyo.............. 4- 6
5- 1 Sanitary sewers, Golden, Colo.... 3-30
5- 1 Sewers, Xenia, Ohio............. 3-30
5- 1 Sewers and water mains, Cloquet, Minn .......................... 4-13
5- 2 Sewer, Edmonton, Alta.......... 4-13
5- 2*Sewers, Pensacola, Fla.......... 3-30
5- 2 Sewers, Canton, S. Dak......... 4-20
5- 3 Sewers, New York.............. 4-27
5- 4 Storm sewer, Ironton, Ohio..... 4-27
5- 5 Sewers, Cleveland, Ohio......... 4-27
5- 5 Sewers, South Bend, Ind........ 4-27
5- 8 Sewers, Huntington, W. Va.... 4-27
5- 8*Sewers, Washington, D. C...... 4-27
5- 8 Sewer, Ft D. A. Russell, Wyo... 4-20
5- 8 Sewers, Elyria, Ohio............ 4-20
5- 8 Sewers, Humbolt, Kan.......... 4-13
5- 9*Laying sewer pipe, Toronto, Ont. 4-13
5-15 Settling tanks, etc., Batavia, N.Y. 4-13
5-15 Sewer, The Dalles, Ore.......... 4-13
5-15 Sewer, Edmonton, Alta.......... 4-27
5-15 Sewers, Aberdeen, S. Dak....... 4-27
5-17 Sewers, Reedsburg, Wis......... 4-27
5-17 Sewers, Antigo, Wis............ 4-27
5-22 Sewer, East Youngstown, Ohio.. 4-27
5-24 Sewers, Williamsport, Pa........ 4-27
7- 3 Sewage disposal system, San Jose, Cal. ........................ 2-23

## Streets and Roads.

4-27 Binding material, Wash., D. C... 4-27
4-28 Sidewalks, New Haven, Conn.... 4-27
4-28 Paving, North Braddock, Pa..... 4-27
4-28 Sidewalks, etc., Springfield, Ohio. 4-27
4-28 Paving, Victoria, B. C.......... 4-20
4-28*Highway Imp'ts, Albany, N. Y.. 3-30
4-28 Road impvt., Cincinnati, Ohio.... 4- 6
4-28*Paving, Jacksonville, Fla........ 4- 6
4-28 St. impvt., Geneva, Ohio......... 4-13
4-29 Road impvt., Marysville, Ohio... 4- 6
4-29 Paving, etc., Boston, Mass...... 3-30
4-29 Gravel roads, Terre Haute, Ind.. 4-20
4-29 Limestone, Canonsburg, Pa...... 4-27
4-29 Paving, Racine, Wis............ 4-27
5- 1 Road, English, Ind.............. 4-27
5- 1 Stone road, Fowler, Ind......... 4-27
5- 1 Plank road, Hoquiam, Wash.... 4-27
5- 1 Paving, etc., Los Angeles, Cal... 4-27
5- 1 Paving, etc., McKees Rocks, Pa. 4-27
5- 1 Pike road, Vernon, Ind......... 4-27
5- 1 Road, Salem, Ind.............. 4-27
5- 1 Paving, Plymouuth, Pa.......... 4-27
5- 1 Repairing streets, Phila., Pa.... 4-27
5- 1 Sidewalks, etc., Boston, Mass.... 4-27
5- 1 Paving, Batavia, Ill............ 4-27
5- 1 Gravel road, Williamsport, Ind.. 4-20
5- 1 Macadam road, Greencastle, Ind.. 4-20
5- 1 Paving, San Luis Obispo, Cal.... 4-20
5- 1 Paving, Ravenna, Ohio ......... 4-20
5- 1*Sidewalks, Grenada, Miss....... 4-20
5- 1 Macadam road, Versailles, Ind... 4-13
5- 1*Highways, Albany, N. Y......... 4-13
5- 2*Paving and curbing, Hudson, N.Y. 4-13
5- 2 Roads, Wabash, Ind............. 4-13
5- 2 Roads, Bedford, Ind. .......... 4-13
5- 2*Paving, New London, Conn...... 4-13
5- 2 Gravel roads, Logansport, Ind... 4-20
5- 2 Macadam road, Bloomfield, Ind.. 4-20
5- 2 Macadam road, Ft. H. G. Wright, N. Y. ........................... 4-20
5- 2*Paving, Charlevoix, Mich........ 4-20
5- 2 Curb and gutter, Columbus, Ohio. 4-20
5- 2 Paving, etc., Boston, Mass....... 4-27
5- 2 Road impvt., Kalama, Wash.... 4-27
5- 2 Macadam road, Wilmington, Del. 4-27
5- 2 Highways, Rockport, Ind........ 4-27
5- 2 Gravel road, Winamac, Ind..... 4-27
5- 2 Street impvt., Chehalis, Wash... 4-27
5- 3 Paving, Pittsburg, Pa.......... 4-27
5- 3 Paving, New Hampton, Iowa... 4-27
5- 3 Grading, etc., New York........ 4-27
5- 3 Grading, etc., Cleveland, Ohio.. 4-20
5- 3 Gravel road, Rockville, Ind...... 4-20
5- 3*Paving, Jacksonville, Fla....... 4-20
5- 3*Resurfacing, Jacksonville, Fla... 4-13
5- 4 Paving, Fort William, Ont...... 4-13
5- 4*Paving, Seneca Falls, N. Y...... 4- 6
5- 4 Paving, Fulton, Mo............. 4-20
5- 4 Paving, etc., New Rochelle, N.Y. 4-20
5- 4 Road impvt., Coshocton, Ohio... 4-27
5- 4 Stone roads, Bluffton, Ind....... 4-27
5- 4 Paving, New York ............. 4-27
5- 5 Paving, Youngstown, Ohio....... 4-27
5- 5 Reconstructing streets, St. Louis, Mo. .......................... 4-27
5- 5 Gravel road, Brazil, Ind......... 4-20
5- 5 Gravel roads, Crown Point, Ind.. 4-20
5- 5 Street improvement, Cincinnati, Ohio ......................... 4-13
5- 6 Asphalt, Washington, D. C....... 4-20
5- 6 Grading, etc., Chardon, Ohio.... 4-27
5- 6*Paving, Washington, D. C........ 4-27
5- 8 Paving, Elyria, Ohio............ 4-20
5- 8 Paving, Barnesville, Ohio......... 4-20
5- 9 Gravel roads, Brookville, Ind.... 4-20
5- 9 Stone road improvement, Bowling Green, Ohio .................... 4-20
5- 9 Roads, Logansport, Ind.......... 4-27
5-10 Road construction, Baltimore, Md. 4-27
5-10 Road impvt., Marysville, Ohio... 4-20
5-10 Paving, Madison, Wis........... 4-27
5-12 Paving, Jacksonville, Fla........ 4-27
5-13 Gravel road, Rushville, Ind..... 4-20
5-15 Paving, etc., Catlettsburg, Ky.... 4-20
5-15 Paving, Lackawanna, N. Y....... 4-20
5-15 Paving, Waukesha, Wis......... 4-27
5-16 Paving, Memphis, Tenn ......... 4-13
5-17 Grading, etc., Columbus, Ohio.... 4-27
5-19 Macadamizing, etc., Cincinnati, O. 4-27

## Miscellaneous.

4-28 Repairs to scows, N. Y.......... 4-20
4-26 Wharf extension, Ottawa, Ont.... 4-13
4-27 Dredging, Fort Moultrie, S. C.... 4-13
4-27 Equipment, Panama (U. S. Poss.) 4-13
4-27 Pier work, Grand Rapids, Mich. 4- 6
4-28 Buildings, shed, etc., Seattle, Wash ....................... 4-13
4-28*Removal of wreck, Boston, Mass. 3-30
4-28 Asphalt plant, St. Louis...... 4-13
4-28 Earth work, Vicksburg...... 4-27
4-29 Air compressor, Hawaii (U. S. Poss.) ..............
4-29 Dredging, Boston, Mass....... 4-13
4-30 Corrugated steel roofs, Egypt (Foreign) .............. 4- 6
5- 1 Iron, etc., Benicia, Cal........ 4- 6
5- 1 Steel barges, Kansas City....... 4- 6
5- 1 Plans for skating rink, Sudbury, Ont. .................. 4-13
5- 1 Drain, Cornwall, Ont......... 4-20
5- 1 Gasoline launches, Ottawa, Ont.. 4-20
5- 1 Street sweeping machine (garbage), New York, N. Y. ......... 4-20
5- 1 Fire protection work, New York.. 4-20
5- 1 Comfort stations, etc., Youngstown, Ohio ............... 4-20
5- 1 Garbage collection [illegible], Gardner, Mass. ......... 4-27
5- 2 Road material, sand, New York.. 4-27
5- 2 Ditch, Honey Point, N. [illegible] 4-27
5- 2*Assessment map, Ossining, N. Y. 4-27
5- 2 Ditch, Youngstown, Ohio...... 4-27
5- 3 Jetties, Fort Hancock, N. J..... 4-20
5- 3 Extension to wharf, White Cove, N. S. .......................... 4-20
5- 3*Dredging, Fort Totten, N. Y..... 4-20
5- 4 Dredging, New York.......... 4- 6
5- 4 Reduction plant (garbage), Columbus, Ohio .................. 3-30
5- 4 Playground apparatus, New York 4-27
5- 4 Rope, New York ............. 4-27
5- 5 Dredging, Cornwall, Ont........ 4-27
5- 5*Dredging, Boston, Mass........ 4-27
5- 6 Quarantine sta., Galveston, Tex. 3-30
5- 6 Dry kiln, Bremerton, Wash...... 4- 6
5- 6 Repairs to ships, Norfolk, Va.... 4- 6
5- 6 Ice mchy., etc., Wash., D. C..... 4-27
5- 8*Incinerator plant, Erie, Pa...... 4-20
5- 8 Steel foundry equip., Panama (U. S. Poss.).......................
5- 9 Wharf, Ottawa, Ont........... 4-27
5- 9 Wharf, Fassett, Que.......... 4-27
5-10*Screening bldgs., Fort Crockett, Tex. .......................... 4-20
5-10 Engineering supplies, Panama (U. S. Poss.) ...................... 4-20
5-10*Dredging, Charleston, S. C..... 4-13
5-10*Lock and dam, Wheeling, W. Va. 4-13
5-11*Dredging, Wilmington, Del..... 4-13
5-11*Lock-house, etc., Wheeling, W. Va 4-13
5-11 Telephone system, Ripley, Ont.. 4-13
5-11 Seawall, etc., Fort Adams, R. I. 4-20
5-12 Launch basin, etc., Fort Hamilton, N. Y. ...................... 4-27
5-12 Breakwater repairs, Boston, Mass 4-20
5-12*Dredging, Jacksonville, Fla..... 4-20
5-15*Dredging, Oswego, N. Y....... 4-13
5-15*Dredging, Newport, R.I........ 4-20
5-15*Dredging, Norfolk, Va......... 4-20
5-15*Dredging, Baltimore, Md....... 4-20
5-15 Dredging, Alexandria, Va...... 4-13
5-15 Dredging, Wilmington, Del..... 4-27
5-15 Canal, etc., Carrollton, Mo..... 4-27
5-16*Repairs to wharf, Fort H. G. Wright, N. Y. ....................
5-16*Drainage, Swanquarter, N. C... 4-27
5-17 Lock and dam, Wheeling, W. Va. 4-20
5-18*Dredging, New York.......... 4-20
5-18 Rope, New York ............ 4-20
5-18*Excavation, etc., Chicago, Ill... 4-27
5-18 Dredging, Wilmington, Del..... 4-27
5-18 Steel, brass, etc., Augusta, Ga.. 4-27
5-19 Culvert pipe, Mt. Gilead, Ohio.. 4-27
5-19*Dredging, New London, Conn... 4-27
5-20*Dredging, New London, Conn... 4-27
5-20*Jetties, etc., Washington, D. C.. 4-27
5-20 Roof coverings, Norfolk, Va.... 4-27
5-22 Rock excavation, Nashville, Tenn 4-27
5-22*Dredging, Wilmington, Del..... 4-27
5-22*Dredging, Jacksonville, Fla..... 4-27
5-23*Dock, Toronto, Ont........... 4-27
5-23 Telegraph, etc., material, Australia (Foreign) ..............
5-24*Dredging, Milwaukee, Wis....... 4-27
5-25*Dredging, etc., Jacksonville, Fla 4-27
5-26*Lock and dam, Cincinnati, Ohio 4-27
5-26 Cottages, McDowell, Ariz....... 4-27
5-26 Steel and rivets, Los Angeles, Cal 4-27
5-27 Pumping equip., Norfolk, Va.... 4-27
5-27 Wharf, trestle, etc., Alaska..... 4-13
5-27*Miter gate-moving machines, Panama (U. S. Poss.).............. 4- 6
5-29 Stone, San Francisco, Cal....... 4-20
5-30 Franchise, Turlock, Cal., (Elec. Ry.) ........................
5-30 Railway construction, Scottsburg Ind. (Elec. Rys.) .............. 4-20
6- 1 Canal, Wilmot, Ark............ 4-13
6- 3 Floating cranes, Washington, D. C. 4- 6
6- 3 Locomotive, Portsmouth, N. H. 4-27
6- 6 Towboat, Vicksburg, Miss....... 4-27
6- 7 Cable, Australia (Foreign)...... 4-27
6-20 Colliers and tugs, Wash., D. C.. 4-27
7-22*Harbor work, Chile (Foreign)... 4-27
7-22 Port work, Chile......(Foreign) 4- 6
8- 1 Designs, etc., for monument, Cincinnati, Ohio ................. 2- 9

## Examinations.

Examination date. — Noted in issue of

4-29 Asst. Topographer, Ottawa, Ont 4-20
4-29 Triangulator and Compositor, Ottawa, Ont. ...................
5- 3 Junior chemist, Wash., D. C..... 4-20
5-10 Scientific Assistant in Wood Utilization, Washington, D. C...... 3-23 4- 6

## Readers' Wants

**If you are in the market for material, equipment or supplies, and fail to find it in our advertising pages, send us full particulars, and we will gladly put you in touch with the right parties.**

ROAD SIGNS.—Montgomery, Ala.—Information regarding signs for streets and roads is desired by J. T. Bullen, County Engineer, Box 160.

SEWER CLEANING APPLIANCES.—Monterrey, N. L., Mexico.—The Monterrey Water Works and Sewer Co., Ltd., V. Saucedo, Ch. Engr., desires information concerning various appliances used in sewer cleaning work.

FRICTION MATERIALS.—Champaign, Ill.—Advices are to the effect that W. H. Almy, 403 Chalmers, desires information on friction materials, such as paper, straw, leather or wood fibers and other compositions of cork or metal.

RAILROAD EQUIPMENT.—Boca Grande, Fla.—The Charlotte Harbor & Northern Railway Co. is in the market for 25 steel phosphate cars, capacity 80,000 lbs., and 25 hopper-bottom Gondolas, capacity 60-80,000 lbs., and one passenger locomotive.

ENGINEERING CATALOGS.—North Yakima, Wash.—The Midland Engineering Co., Miller Bldg., advises us that it desires catalogs, trade publications and other literature on machinery, equipment, engineering instruments, material, supplies, etc., from the various manufacturers.

WELDING APPARATUS, ETC.—Garfield, Utah.—C. W. Wilson, Engr. the Garfield Smelting Co., desires information from the manufacturers or selling agents of Oxy-Acetylene Welding apparatus.

O. JOHNS, Commissioner of Public Property, Moline, Ill., wants catalogs of engineering materials and supplies.

THE CRUSE ENGINEERING CO., Crozer Building, 1420 Chestnut St., Philadelphia, Pa., has been organized by Arthur R. Cruse for business in gas engineering and structural steel work. It is intended to cooperate with three separate manufacturing plants in the following lines: gas holders, shell and tank work and general plate work, structural steel work.

THE TERRY & TENCH CO., INC., has removed its offices to 70 East 45th St., a part of the Grand Central Terminal. The company has erected practically all of the structural steel in the suburban station, the main station building, the boiler-house and the Merchants' & Manufacturers' Building of this new terminal and it is concluded that they could find no more fitting place for an office than at the work itself.

### INDUSTRIAL NOTES.

MR. ALEX. CRAWFORD has been appointed Purchasing Agent for the Hyatt Roller Bearing Co., Newark, N. J.

MR. C. H. PEARSON, formerly with the Noera Mfg. Co., Waterbury, Conn., is now in the hoist department of The Yale & Towne Mfg. Co. Mr. Pearson's field of operations will be in the West.

RODMAN GILDER, Secretary of the Crocker-Wheeler Co., Ampere, N. J., has resigned to become associated with the brokerage house of Dick Bros. & Co., 30 Broad St., New York.

THE ORTON & STEINBRENNER CO., Chicago, Ill., announce the appointment of W. Van R. Whitall, Inc., 30 Church St., New York City, as their New York and New England representatives for their locomotive cranes and grab buckets.

THE AMERICAN BUREAU of Inspection and Tests, Monadnock Block, Chicago, Ill., announces the appointment of Mr. George W. Greene as Inspecting Engineer, vice Mr. Morgan T. Jones, retired; and the appointment of Mr. E. C. McMillan, Mechinacl Engineer, to succeed Mr. Greene.

THE INTERNATIONAL ACHESON GRAPHITE CO., Niagara Falls, N. Y., became, on April 1, the general agents in the United States for the sale of the new lubricants, Oildag and Agnadag, products of the Acheson Oildag Co. The production of Acheson-Graphite last year was over 13,000,000 lbs.

THE GOLDSCHMIDT THERMIT CO., 90 West St., New York, N. Y., has recently increased its force of metallurgists by acquiring the services of Dr. E. A. Beck, who brings a varied experience in the metallurgical field. The company will be glad to give technical advice on all matters pertaining to the use of its metals and alloys in the production of special steels, brasses and bronzes.

HAROLD L. BOND CO., of New York, announce that Mr. Burr, well known to the contracting trade in New York City, is now associated with the company. The office and warehouse have been recently moved to 78-80 Beach St., near West St., where with a much larger and varied stock of contractor's equipment and supplies will be carried.

THE BUFFALO STEAM PUMP CO., Buffalo, N. Y., has recently been awarded a contract by the Borough of South River, N. J., for furnishing pumps for the new waterworks plant. The pumping equipment consists of two 5-in. two-stage centrifugal pumps, each with a capacity of 800,000 gallons of water per day against a total head of 135 lbs. The pumps will be driven by 75-HP., 1,700 r.p.m. Fort Wayne motors.

A MANUFACTURING BUILDING about 50 × 100 ft. and two or three stories high, for lease or purchase, is wanted by the Russell Automatic Gas Machine Co., of Rockford, Ill. The company's business is increasing to such an extent that it proposes to establish a manufacturing plant in some city where such a building is already available. The company manufactures a machine for making gas for lighting, cooking, heating and power purposes.

TO HANDLE MORE EFFICIENTLY its increasing business in the middle west, the Iroquois Iron Works, of Buffalo, New York, have established a warehouse in Chicago, where a complete line of macadam and tandem rollers, asphalt tools, kettles, etc., is now carried for immediate shipment. The new shipping depot is in charge of Mr. T. H. Morris, the Chicago representative of the Iroquois Iron Works, with offices in the Tribune Bldg.

THE McCORMICK WATERPROOF PORTLAND CEMENT CO., of St. Louis, Mo., has opened another office in the Reserve Bank Bldg., Kansas City, Mo. Mr. Wm. H. K. Bennewitz has been appointed Special Representative of the company in that territory. The McCormick Waterproof Portland Cement Co. has now seven offices located in the following cities: St. Louis, Mo.; Chicago, Ill.; New York City; Boston, Mass.; Pittsburg, Pa.; Toledo, Ohio, and Kansas City, Mo.

MR. R. G. DAVIS, M. Am. Soc. C. E., has established an office at 39 Cortlandt St., New York, for the practice of consulting and constructing engineering, and will make a specialty of steam and hot water heating. Mr. Davis was for six years Consulting and Superintending Engineer for John T. Williams, Arch. and Builder, New York City, three years with McKim, Mead & White, Archs., New York, and six years a member of the firm of Geo. H. Ward & Co., Engrs. and Machinists, Brooklyn, N. Y.

THE SULLIVAN MACHINERY CO., Chicago, has established an office at 814 Salisbury House, London Wall, London, E. C., England, which will, in the future, have general charge of the business in England and on the Continent of Europe. Mr. Howard T. Walsh, for several years Pacific Coast Manager at San Francisco, is in charge of this new office, and has associated with him, Mr. Arthur F. Belding, who has been with the Joplin office of the company for some time.

MR. JOHN C. ANDERSON, of Westinghouse, Church, Kerr & Co., Pittsburg, Pa., has resigned to take position as mechanical engineer in the Sales Department of the Pressed Steel Car Co., in New York. Mr. Anderson is a graduate of the Sheffield Scientific School of Yale University, and has been connected with the Northern Pacific and Baltimore & Ohio Railroads. He is a son of the late Gen. Adna Anderson, formerly Vice-Pres. and Ch. Engr. of the Northern Pacific R. R. Co. His appointment is effective May 1.

RECENT ORDERS taken by the Buffalo Forge Co., Buffalo, N. Y., for mechanical draft apparatus of considerable size include among others the Cambria Steel Co., Johnstown, Pa.; the American Smelting & Refining Co., New York, N. Y.; the Burgess Sulphite Fibre Co., Berlin, N. H.; Knickerbocker Portland Cement Co., Hudson, N. Y., and several export orders from their agents in Germany, Japan and South America. The company reports export business particularly active this year and with excellent prospects of exceeding any former season.

THE LEHIGH PORTLAND CEMENT CO., Allentown, Pa., is building at its new plant at Mason City, Iowa, a very large clay storage building in which to store a supply of clay for the winter months. Part of the building will be used to store limestone. The building is 1,000 × 80 ft., of concrete and steel, with steel roof trusses. Belt conveyors in underground tunnels will enable clay to be taken from any part of the storage house. The plant will have a capacity of about 5,000 bbls. daily, and it is expected to have it completed in August.

SOUVENIRS AT AMERICAN WATER WORKS CONVENTION.—Souvenirs are not to be distributed at the coming convention of the American Water Works Convention. In this organization, as in others, the competition in the distribution of souvenirs in connection with the exhibits at the annual meetings has become so great that the Exhibitors' Association has taken steps to check it. The Executive Committee of the Water Works Manufacturers' Association sent out a letter on Dec. 14 asking the members to refrain from the distribution of souvenirs. Under date of April 18 it announces that all the members have agreed to adopt the suggestion.

SIX YEARS AGO the J. I. Case Threshing Machine Co. put on the market their power steered 10-ton steam road roller, which was the only power steered roller on the market. That made it unique. This year the company decided to put forth a line almost complete for road building. In addition to the road roller and road sprinkling wagons they have been selling, they have added recently the Perfection graders and drags, rock crushers, rotary stone screens, rooters, road scrapers, railroad and township plows and the Troy line of bottom dump wagons and boxes; also the Troy reversible bottom dump wagons and Case municipal tractors, especially constructed for use on any kind of paved streets, and Case contractors' hauling engines, which complete the line.

FOR THE PURPOSE of aiding American manufacturers and business men in getting their goods into Germany and favorably placing the same, the American Association of Commerce and Trade, 59-60 Friedrich-Strasse, Equitable Bldg., Berlin, was organized eight years ago by American business men doing business in the German Empire. The Association, carried on as an American Chamber of Commerce, with its Board of Directors and its committees is doing an unselfish work in aiding American manufacturers. The Secretary, Mr. George S. Atwood, for the past twenty years in close touch with the German business world and the German government departments, is able to promptly answer all inquiries and save time in the establishment of American branches. The work of the Association extends over the entire United States and all Germany. American business men, call upon the Association to help you and it will promptly and satisfactorily answer your call.

**For other Proposal Advertisement see pages 49, 50, 52, 53, 56 of Advertisements and Construction News page 206.**

## ASHBRIDGE BAY DOCKS.

City of Toronto.

Tenders will be received by registered post only, addressed to the Chairman of the Board of Control, City Hall, Toronto, Canada, up to noon on Tuesday, 23d May, 1911, for the construction of dock in Ashbridge Bay.

Envelopes containing tender must be plainly marked on the outside as to contents.

Specifications and forms of tender may be obtained upon application to the Department of Railways, Bridges and Docks, City Engineer's office, Toronto.

The lowest or any tender not necessarily accepted.

G. R. GEARY, Mayor,
Chairman Board of Control.
City Hall, Toronto, April 12th, 1911.

## TRUNK SEWER.

CITY OF EDMONTON, ALBERTA,
CANADA.

Sealed tenders marked "Tenders for Trunk Sewer" will be received by the "City Commissioners" up till 3 p. m., May 2d, 1911, for the supplying of all materials and the construction, in tunnel, of a concrete sewer (10' 6") ten feet six inches in internal diameter and approximately 3,290 feet long.

Plans and specifications and all particulars may be obtained from the City Engineer's Office, Edmonton, on deposit of a marked cheque for the sum of $25.00, which will be held until the return of plans and specifications.

Plans and specifications can be seen at the office of Alexander Potter, Consulting Engineer, 114 Liberty Street, New York City.

Letting postponed until May 15th, 1911.

Lowest or any tender not necessarily accepted.

CITY COMMISSIONERS.
A. J. LATORNELL,
City Engineer,
Edmonton, Alberta.

COMMONWEALTH OF MASSACHUSETTS.—Board of Harbor and Land Commissioners, State House, Boston, April 24, 1911.—Sealed bids or proposals for dredging in the entrance channel and anchorage basin of the harbor of Cohasset will be received by the Board of Harbor and Land Commissioners at Room 131, State House, Boston, Mass., until 2 o'clock p. m., Friday, May 5, 1911, and then and there will be publicly opened and read. The work to be done is the dredging of about 40,000 cubic yards of material to enlarge the anchorage basin and deepen and widen the entrance channel. All dredging to be to the depth of 6 feet at mean low water. All proposals must be made upon blank forms, which, together with information in regard to the work, may be obtained at the office of the Board, where plans and specifications may be seen. Each bidder will be required to give to the Board satisfactory assurance of his competency, experience and responsibility. The right is reserved to reject any and all bids and to waive any defect or informality at the discretion of the Board. GEORGE E. SMITH, SAMUEL M. MANSFIELD, HEMAN A. HARDING, Harbor and Land Commissioners; FRANK W. HODGDON, Chief Engineer.

## ASSESSMENT MAP.

Ossining, N. Y.

Bids will be received for making a Village Assessment Map, of the Village of Ossining, according to Specifications on file with the Village Clerk, copies of which may be had on application. Bids must be delivered to the Village Clerk, not later than 8 P. M., May 2nd, 1911.

By Order of the Board of Trustees of the Village of Ossining, N. Y.
RICHARD A. WARD,
Village Clerk.
Dated April 18th, 1911.

## WATER MAINS.

Geneva, N. Y.

Sealed bids are asked for by the Board of Public Works of the City of Geneva, N. Y., until 7.30 P. M., Thursday, May 11th, 1911, for laying about 13,000 feet of 20-inch cast-iron water main, including valves and specials.

Specifications, blank proposals, etc., may be had on application to Board.

C. T. CHURCH,
Superintendent.
April 25, 1911.

OFFICE, COMMISSIONERS, DISTRICT OF COLUMBIA, Washington, April 21, 1911.—Sealed proposals will be received at this office until 2 o'clock P. M., Saturday, May 6, 1911, for laying asphalt block pavements. Forms of proposal, specifications, and necessary information may be obtained from Chief Clerk, Engineer Department, Room 427, District Building. CUNO H. RUDOLPH, JOHN A. JOHNSTON, WILLIAM V. JUDSON, Commissioners, D. C.

## STONE SETTING.

Keene, N. H.

We desire to sublet the setting of approximately seven thousand cubic feet of exterior granite for United States Post Office at Keene, N. H. Work to start June 1st. Will also sublet labor brick work.

R. H. HOWES CONSTRUCTION CO.,
105 West 40th St., N. Y.

## WHEEL SCRAPER WORK.

Stillwater, N. Y.

We have about 16,000 cu. yds. of good wheel scraper work to sublet at Stillwater, New York. Address

THE CENTRAL DREDGING CO.,
Schuylerville, N. Y.

## CONTRACTORS.

Are you interested in approximately 60,000 cubic yards of scraper and team work in New England? Communicate with "S. 17," Engineering News, New York.

OFFICE OF THE COMMISSIONERS OF THE DISTRICT OF COLUMBIA, Washington, D. C., April 24, 1911.—Sealed proposals will be received at this office until 2 o'clock P. M., May 8, 1911, for constructing sewers in the District of Columbia. Specifications, forms of proposals and necessary information may be obtained from the Chief Clerk, Engineer Department, Room 427, District Building, Washington, D. C. CUNO H. RUDOLPH, JOHN A. JOHNSTON, Wm. V. JUDSON, Commissioners, D. C.

U. S. ENGINEER OFFICE, Milwaukee, Wis., April 24, 1911.—Sealed proposals for dredging at Oconto Harbor, Wis., will be received here until 12 M., May 24, 1911, and then publicly opened. Information on application. GEO. A. ZINN, Lieut. Col., Engrs.

U. S. ENGINEER OFFICE, Jacksonville, Fla., April 22, 1911.—Sealed proposals for dredging in Caloosahatchee River and entrance, Florida, will be received at this office until 12 M., May 22, 1911, and then publicly opened. Information on application. GEO. R. SPALDING, Capt., Engrs.

U. S. ENGINEER OFFICE, 920 17th St., N. W., Washington, D. C., Apr. 20, 1911.—Sealed proposals for constructing and revetting jetties and driving marking piles in James River, Virginia, will be received at this office until 12 M., May 20, 1911, and then publicly opened. Information on application at U. S. Engineer Office, 28 N. 9th St., Richmond, Va. W. C. LANGFITT, Lieut. Col., Engrs.

U. S. ENGINEER OFFICE, Nashville, Tenn., April 22, 1911.—Sealed proposals for Rock Excavation at Tuscumbia Bar, near Sheffield, Alabama, will be received here until 11 a. m., standard time, May 22, 1911, and then publicly opened. Information on application. WM. W. HARTS, Major, Engrs.

U. S. ENGINEER OFFICE, New London, Conn., April 19, 1911.—Sealed proposals for dredging in Shaws Cove, New London Harbor, Conn., will be received here until 3.00 p. m., May 19, 1911, and then publicly opened. Information on application. HARRY TAYLOR, Lt. Col. Engineers.

U. S. ENGINEER OFFICE, New London, Conn., April 20, 1911.—Sealed proposals for dredging in Pawcatuck River, R. I., and Conn., will be received here until 3.00 p. m., May 20, 1911, and then publicly opened. Information on application. HARRY TAYLOR, Lt. Col., Engineers.

OFFICE OF THE CONSTRUCTING QUARTERMASTER, New London, Conn., April 24, 1911.—Sealed proposals for Repairs to Timber Wharf at Fort H. G. Wright, N. Y., will be received here until 11 a. m., May 16, 1911. Apply to CAPT. F. T. ARNOLD, Constructing Quartermaster, New London, Conn.

UNITED STATES ENGINEER OFFICE, Jacksonville, Fla., April 25, 1911.—Sealed proposals for dredging and constructing shore revetment in St. Johns River, Fla., will be received at this office until 12 M., May 25, 1911, and then publicly opened. Information on application. GEO. R. SPALDING, Capt., Engrs.

U. S. ENGINEER OFFICE, Room 415, Customhouse, Cincinnati, O., April 26, 1911.—Sealed proposals for constructing Lock and Dam No. 14, Kentucky River, at Heidelberg, P. O., Ky., will be received here until 12 o'clock noon, standard time, May 26, 1911, and then publicly opened. Information on application. JOHN C. OAKES, Major, Engrs.

U. S. ENGINEER OFFICE, Oswego, N. Y., April 15, 1911.—Sealed proposals for dredging at Ogdensburg Harbor, N. Y., will be received at this office until 10 A. M., May 15, 1911, and then publicly opened. Information upon application. W. L. GUTHRIE, Captain, Engineers.

## CATSKILL AQUEDUCT.

CONTRACT 65.

New York, N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, seventh floor, 165 Broadway, New York, until 11 A. M. on Tuesday, May 16, 1911, for Contract 65, for the construction of **a portion of the City tunnel of the Catskill aqueduct, a circular tunnel in rock, 15 feet and 14 feet inside diameter. From the northerly end of the work at Aqueduct and Burnside avenues near University Heights, the tunnel line extends in a general southerly direction under** Aqueduct and Lind avenues, in the Borough of The Bronx, to the crossing under the Harlem river at 167th street, near Highbridge, thence beneath Highbridge, St. Nicholas and Morningside parks and connecting streets, in the Borough of Manhattan, to Central park near Eighth avenue and West 99th street. The work will be carried on through 7 shafts, spaced from 2,500 to 5,100 feet apart, and varying in depth from 260 to 475 feet.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, and pamphlets of contract drawings can be obtained at the above address by depositing the sum of ten dollars ($10) for each pamphlet. For further particulars see Information for Bidders.

CHARLES STRAUSS, President;
CHARLES N. CHADWICK,
JOHN F. GALVIN,
Commissioners of the Board of Water Supply.
JOSEPH P. MORRISSEY,
Secretary.

## CATSKILL AQUEDUCT.

CONTRACT 66.

New York, N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, seventh floor, 165 Broadway, New York, until 11 A. M. on Tuesday, May 16, 1911, for Contract 66, for the construction of a portion of the City tunnel of the Catskill aqueduct, a circular tunnel in rock, varying from 14 feet to 12 feet inside diameter. From the northerly end of the work in Central park, near Eighth avenue and West 99th street, the tunnel line extends in a general southerly direction under Central park, Sixth avenue and Broadway to 14th street, in Union Square. The work will be carried on through 6 shafts, spaced from 2,300 to 4,550 feet apart, and varying in depth from 200 to 250 feet.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, and pamphlets of contract drawings can be obtained at the above address by depositing the sum of ten dollars ($10) for each pamphlet. For further particulars see Information for Bidders.

CHARLES STRAUSS, President;
CHARLES N. CHADWICK,
JOHN F. GALVIN,
Commissioners of the Board of Water Supply.
JOSEPH P. MORRISSEY,
Secretary.

## CATSKILL AQUEDUCT.

CONTRACT 67.

New York, N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, seventh floor, 165 Broadway, New York, until 11 A. M. on Tuesday, May 16, 1911, for Contract 67, for the construction of **a portion of the City tunnel of the Catskill aqueduct, a circular tunnel in rock, 12 feet and 11 feet inside diameter. From the northerly end of the work in Union Square, at 14th Street, the tunnel line extends in a general southerly direction through the Borough of Manhattan, under Fourth avenue, the Bowery, Delancey, Allen, Hester and Clinton streets, thence beneath the East river to the foot of Bridge street, in the Borough of Brooklyn, and through this Borough under Bridge street and Flatbush avenue to the terminal shaft, Shaft 23, at Third avenue and Schermerhorn street, and from Flatbush avenue under Lafayette street to the terminal shaft, Shaft 24, in Fort Greene park. The work will be carried on through 6 shafts, spaced from 3,800 to 5,200 feet apart, and varying in depth from 310 to 740 feet.**

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, and pamphlets of contract drawings can be obtained at the above address by depositing the sum of ten dollars ($10) for each pamphlet. For further particulars see Information for Bidders.

CHARLES STRAUSS, President;
CHARLES N. CHADWICK,
JOHN F. GALVIN,
Commissioners of the Board of Water Supply.
JOSEPH P. MORRISSEY,
Secretary.

## CATSKILL AQUEDUCT.

CONTRACT 63.

New York, N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, seventh floor, 165 Broadway, New York, until 11 A. M. on Tuesday, May 16, 1911, for Contract 63, for the construction of a portion of the City tunnel of the Catskill aqueduct, a circular tunnel in rock, 15 feet inside diameter, and about 21,260 feet long. From the northerly end of **the work in Yonkers, about 200 feet north of the New York City line, between Jerome and Mt. Vernon avenues, the tunnel line extends in a general southerly direction through the Borough of The Bronx, under Van Cortlandt Park and Jerome Park reservoir, and thence beneath the Old Croton aqueduct and Aqueduct avenue to Burnside avenue, near University Heights. Tunnel construction will be carried on through five shafts, spaced from 3,500 to 5,000 feet apart, and varying in depth from 215 to 240 feet.**

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, and pamphlets of contract drawings can be obtained at the above address by depositing the sum of ten dollars ($10) for each pamphlet. For further particulars see Information for Bidders.

CHARLES STRAUSS, President;
CHARLES N. CHADWICK,
JOHN F. GALVIN,
Commissioners of the Board of Water Supply.
JOSEPH P. MORRISSEY,
Secretary.

## COLLEY AVENUE SEWER PUMPS.

Norfolk, Va.

Bids will be received at the office of the Board of Control, Norfolk, Va., until 12.30 o'clock P. M., May 16th, 1911, for furnishing, delivering and installing three electrically driven centrifugal sewer pumps, including electrical apparatus, switch board, etc.

The pumps will be of the following capacity: Two of 1,000 gallons per minute and one 1,500 gallons per minute.

Plans and specifications can be had upon application at the City Engineer's office.

A certified check in amount of 5% of the amount of bid will be required with each bid.

The right to reject any and all bids is reserved.

(Signed) T. S. PURDIE,
Ch. Board Control.
W. T. BROOKE, City Engineer.

## WATER-WORKS IMPROVEMENT.

Mansfield, Ohio.

Sealed proposals will be received at the office of the Secretary of the Board of Control, City Hall, Mansfield, Ohio, until 12 o'clock noon, Tuesday, May 2, 1911, for improving the City Water Works by installing additional pumping equipment, consisting of Power House Equipment, Motor driven pumps and Transmission lines.

Plans and specifications may be seen and blank proposals can be obtained at the office of the City Engineer after April 18, 1911.

Each proposal must contain the full name of the party or parties making the same and all persons interested therein, and must be accompanied by a certified check for 5% of the amount of bid, payable to the Director of Public Service of the City of Mansfield, Ohio, on a solvent **bank in the City of Mansfield, Ohio, or bond secured with two or more securities or with a surety company as surety that if the proposal be accepted a contract will be entered into.**

No proposal will be entertained unless made on the blanks furnished by the City Engineer and delivered at the office of the Secretary of the Board of Control, City Hall, previous to 12 o'clock M. on the day specified.

The City reserves the right to reject any or all bids.

JOHN CAHALL,
Director of Public Service.
Countersigned:
A. KALLMERTEN,
Secretary Director of Public Service.

## PLUMBING, ETC.

Kings Park, N. Y.

Sealed proposals for additional plumbing and tile floors, Group No. 1, construction and plumbing, at the Kings Park State Hospital, Kings Park, N. Y., will be received by the State Commission in Lunacy, No. 53 Lancaster St., Albany, N. Y., until 3 o'clock P. M., on Wednesday, May 3rd, 1911, when they will be opened and read publicly.

Proposals shall be accompanied by a certified check in the sum of $300 and the contractor to whom the award is made will be required to furnish Surety Company bond in the sum of $3,000, within 30 days after official notice of award of contract and in accordance with the terms of specification No. 1,430. The right is reserved to reject any or all bids.

Drawings and specifications may be consulted and blank forms of proposals obtained at the Kings Park State Hospital, Kings Park, N. Y., at the office of the State Commission in Lunacy, No. 1 Madison Ave., New York City, and at the office of the State Architect. Complete sets of plans and specifications will be furnished to prospective bidders upon reasonable notice to, and in the discretion of the State Architect, Franklin B. Ware, Albany, N. Y.

T. E. McGARR, Secretary.
State Commission in Lunacy.

## WATER MAIN.

PROPOSALS FOR A 24-INCH SUBMERGED WATER MAIN IN THE RARITAN RIVER FOR THE CITY OF PERTH AMBOY, N. J.

Sealed proposals will be received at the office of the Board of Water Commissioners of the City of Perth Amboy, N. J., at the City Hall at 8.30 o'clock p. m., May 3rd, 1911, for furnishing and laying 24-inch Submerged Water Main with connections in accordance with plans and specifications on file in the office of the Clerk of the Board of Water Commissioners in the City Hall, copies of which may be obtained of Samuel J. Mason, Engineer, at No. 102 Smith Street, Perth Amboy, N. J.

One hundred and twenty working days will be allowed for the completion of the contract.

A certified check for $5,000, payable to the order of the City Treasurer must accompany each bid.

The right is reserved to reject any or all proposals.

By order of the Board of Water Commissioners.

S. J. MASON,
Engineer.

## ARTESIAN WELL.

Tipton, Iowa.

Sealed proposals will be received by the City Council of Tipton, Iowa, until 7.30 p. m., May 15, 1911, for the work of drilling an artesian well, furnishing all labor, and material necessary to complete same according to specifications now on file with the City Clerk. Instructions and specifications can be obtained upon application.

Right reserved to reject any and all proposals.

By order of the City Council, Tipton, Iowa.

C. H. FOY,
Clerk.

U. S. ENGINEER OFFICE, Wilmington, Del., Apr 21, 1911. Sealed proposals for dredging Leipsic River, Del., will be received here until 11 a. m., May 22, 1911, and then publicly opened. Information on application. R. R. RAYMOND, Maj., Engrs.

## CHANNEL EXCA[illegible]TION.

THE SANITARY D[illegible]CT OF CHICAG[illegible]

CALUMET-SAG CHA[illegible] EXCAVATION.

Sealed proposals endo[illegible] Proposals for Excavation and Co[illegible] Work on Contract Section Three [illegible] Calumet-Sag Channel" will be [illegible] by the Clerk of the Sanitary D[illegible] the office of the District, on t[illegible] floor of the American Trust Bu[illegible] Chicago, Illinois, until 12 M., Sta[illegible] time, on May 18, 1911, and will be [illegible] opened by the Board of Trustees [illegible] ting to be held on that day, or th[illegible] meeting thereafter.

The work for which tend[illegible] invited consists of the Excavation [illegible] collateral Work on Contract Section [illegible] of the Calumet-Sag Channel of [illegible] Sanitary District of Chicago, the [illegible] hip of Palos, County of Cook, Stat[illegible] llinois.

The approximate quantitie[illegible] the comparison of bids are:

(a) 325,000 cubic yards of G[illegible] drift.
(b) 197,000 cubic yards of R[illegible] excavation.
(c) 83,500 square feet of ch[illegible]ing.
(d) 7,500 cubic yards of [illegible]te retaining wall.
(e) 114,000 square yards of ri[illegible] slopes.

Plans and specifications m[illegible] be obtained upon application at th[illegible] office of the said District.

All bids must be upon blank [illegible]rms of proposals furnished by the Sa[illegible] District and shall be made in a[illegible]ordance with and to conform with all [illegible] terms and conditions stated therein.

The Board of Trustees reserves the right to reject any and all bids.

THE SANITARY DISTRICT OF CHICAGO.
By THOMAS A. SMYTH,
President of its Board of Trustees.
Attest:
I. J. BRYAN,
Clerk.
Chicago, April 21, 1911.

## DRY EXCAVATION.

One million cubic yards of dry excavation, suitable for light steam shovel plants, etc. To let on the Cape Cod Canal. The work will be let in sections. Apply to FURST-CLARK CONSTRUCTION CO., Sandwich, Mass.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., April 22, 1911.—Sealed proposals will be received in this office until 3 o'clock P. M. on the 5th day of June, 1911, and then opened for the construction, complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring and lighting fixtures of the U. S. Post Office at Dublin, Georgia, in accordance with drawings and specifications, copies of which may be obtained from the Custodian of Site at Dublin, Ga., or at this office at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

For Additional

**PROPOSAL**

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FOR SALE

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**CRANE**

closed house, 50 ft. boom, with 1 yd. clam shell **BUCKET,** standard gauge trucks, double drums, outrigger and rail clamps and all fittings. In use one year, guaranteed in first-class order.

Also one 10 inch sand

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